

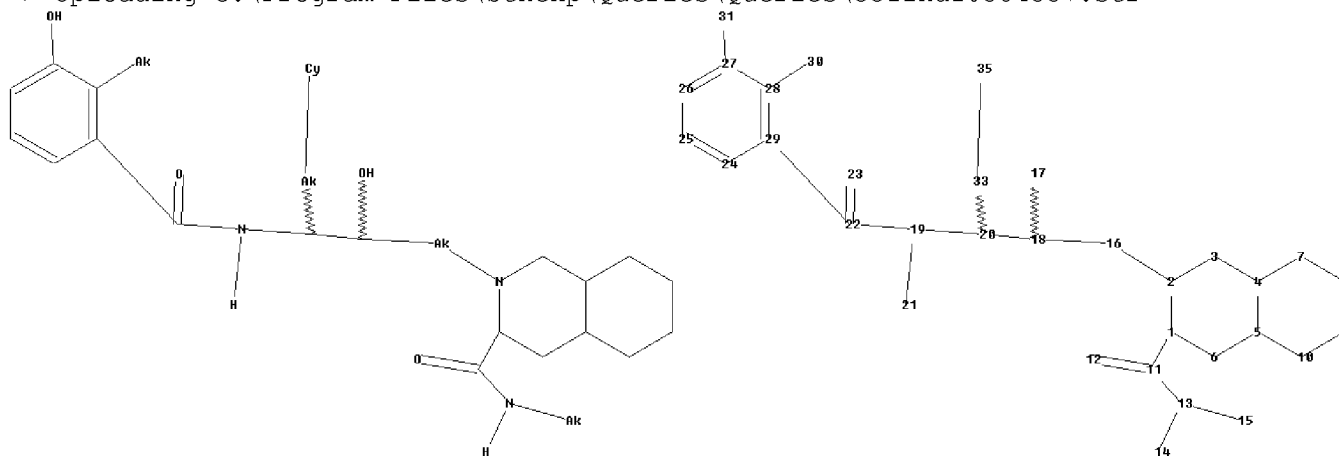
10/564,557

\*\*\*\*\* Welcome to STN International \*\*\*\*\*  
\*\*\*\*\* STN Columbus \*\*\*\*\*

FILE 'HOME' ENTERED AT 11:19:08 ON 31 MAR 2008

=> file reg

=> Uploading C:\Program Files\Stnexp\Queries\Queries\3312nd10564557.str



chain nodes :

11 12 13 14 15 16 17 18 19 20 21 22 23 30 31 33 35

ring nodes :

1 2 3 4 5 6 7 8 9 10 24 25 26 27 28 29

chain bonds :

1-11 2-16 11-12 11-13 13-14 13-15 16-18 17-18 18-20 19-20 19-21 19-22  
20-33 22-23 22-29 27-31 28-30 33-35

ring bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-10 7-8 8-9 9-10 24-25 24-29 25-26 26-27  
27-28 28-29

exact/norm bonds :

1-2 1-6 2-3 2-16 3-4 4-5 4-7 5-6 5-10 7-8 8-9 9-10 11-12 11-13 13-15  
16-18 17-18 19-20 19-22 20-33 22-23 27-31 28-30 33-35

exact bonds :

1-11 13-14 18-20 19-21 22-29

normalized bonds :

24-25 24-29 25-26 26-27 27-28 28-29

isolated ring systems :

containing 1 : 24 :

G1:O,S,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS  
19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:Atom 25:Atom 26:Atom  
27:Atom 28:Atom 29:Atom 30:CLASS 31:CLASS 33:CLASS 35:Atom

=> s l1 sam

L2 0 SEA SSS SAM L1

=> s l1 full

L3 9 SEA SSS FUL L1

=> file caplus

=&gt; s 13

L4 7 L3

=&gt; s 13 and pd&lt; july 2003

7 L3

23779907 PD&lt; JULY 2003

(PD&lt;20030700)

L5 6 L3 AND PD&lt; JULY 2003

=&gt; dis 15 1-6 bib abs hitstr

L5 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2002:964340 CAPLUS Full-text

DN 138:39544

TI Preparation of amino acid amides as HIV protease inhibitors

IN Canon-Koch, Stacie S.; Alexander, Therese N.; Barvian, Mark; Bolton, Gary;  
 Boyer, Fredrick E.; Burke, Benjamin J.; Holler, Tod; Jewell, Tanya M.;  
 Prasad, Josyula Vara; Kucera, David J.; Linton, Maria A.; Machak, Jeff;  
 Mitchell, Lennert J.; Murphy, Sean T.; Reich, Siegfried H.; Skalitzky,  
 Donald J.; Tatlock, John H.; Varney, Michael D.; Virgil, Scott C.; Webber,  
 Stephen E.; Worland, Stephen T.; Melnick, Michael

PA Agouron Pharmaceuticals, Inc., USA

SO PCT Int. Appl., 306 pp.

CODEN: PIXXD2

DT Patent

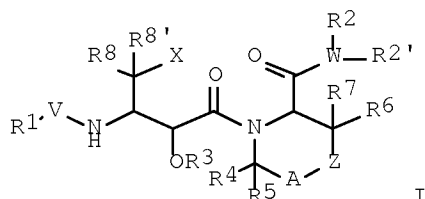
LA English

FAN.CNT 4

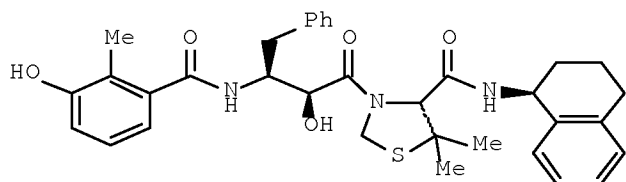
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002100844	A2	20021219	WO 2002-US18717	20020611 <--
	WO 2002100844	A3	20030306		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	CA 2450265	A1	20021219	CA 2002-2450265	20020611 <--
	AU 2002316235	A1	20021223	AU 2002-316235	20020611 <--
	AU 2002316235	A2	20021223		
	EP 1409466	A2	20040421	EP 2002-746518	20020611
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	BR 2002010358	A	20040622	BR 2002-10358	20020611
	JP 2004534061	T	20041111	JP 2003-503612	20020611
	CN 1599729	A	20050323	CN 2002-813345	20020611
	CN 1622942	A	20050601	CN 2002-813251	20020611
	NZ 530024	A	20051028	NZ 2002-530024	20020611
	EP 1739082	A1	20070103	EP 2006-20180	20020611
	R:	AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR, AL, LT, LV, MK, RO, SI			
	ZA 2003009041	A	20040722	ZA 2003-9041	20031120
	ZA 2003009040	A	20050527	ZA 2003-9040	20031120
	IN 2003KN01516	A	20060602	IN 2003-KN1516	20031120
	MX 2003PA11397	A	20050307	MX 2003-PA11397	20031209
	AU 2006235964	A1	20061130	AU 2006-235964	20061110
PRAI	US 2001-297460P	P	20010611		

US 2001-297729P	P	20010611
AU 2002-345644	A3	20020611
EP 2002-744295	A3	20020611
WO 2002-US18717	W	20020611

OS MARPAT 138:39544  
GI



I



II

AB Synthetic amides I [R1 is an aliphatic, carbo- or heterocyclic group, OR1', SR1', NHR1', NR1'R1'', or COR1', where R1' is an aliphatic, carbo- or heterocyclic group and R1'' is H or an aliphatic group or NR1'R1'' is (un)substituted heterocyclyl; V is CO, CS, or SO2; R2 is an aliphatic, carbocyclic, or carbocyclic aliphatic group, or NR2aR2b, where R2a is an aliphatic, carbo-, or heterocyclic group and R2b is H or an aliphatic group; W is N, O, C, or CH; R2' is H or an aliphatic group (when W is N, C or CH) or R2R2'W is an (un)substituted carbo- or heterocyclic ring; R2 is absent when W is O; X is (un)substituted Ph, phenoxy, phenylthio, benzyl, or phenethyl; R8, R8' are H, halo, or an aliphatic group; A is CH2, CHRA, or is absent; Z is S, O, SO, SO2, CH2, CHF, CF2, CHOH, CH(ORZ), CH(NRZRZ'), CH(SRZ), CO, or CHRZ, where RZ is an aliphatic, carbo-, or heterocyclic group and RZ' is H or an aliphatic group; or RA and RZ taken together with A and Z form an (un)substituted carbo- or heterocyclic ring; R3 is H or an aliphatic group; R4, R5 are H, halo, an aliphatic or acyl group group; R4 may combine with R5 or with R6 or R7 to form a ring; R6, R7 are H or an aliphatic group] inhibit or block the biol. activity of the HIV protease. Thus, thiazolidinecarboxamide derivative II was prepared via amidation reactions and showed  $K_i = 0.21$  nM for inhibition of HIV-1 protease. A combinatorial chemical approach to HIV protease inhibitors was also presented.

IT 478698-82-7P 478699-77-3P

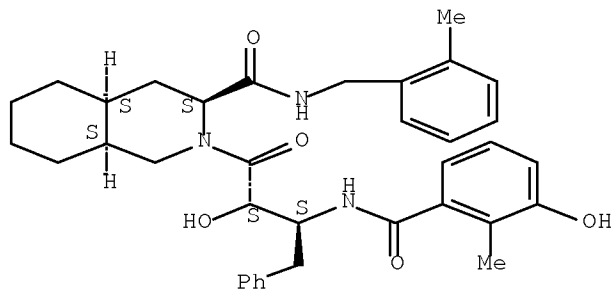
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amino acid amides as HIV protease inhibitors)

RN 478698-82-7 CAPLUS

CN 3-Isoquinolinecarboxamide, decahydro-2-[(2S,3S)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-1-oxo-4-phenylbutyl]-N-[(2-methylphenyl)methyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

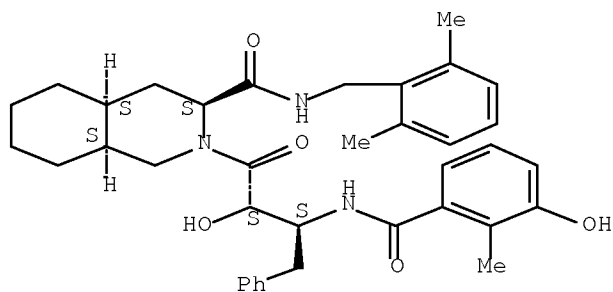
Absolute stereochemistry.



RN 478699-77-3 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[(2,6-dimethylphenyl)methyl]decahydro-2-[(2S,3S)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-1-oxo-4-phenylbutyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1998:351758 CAPLUS Full-text

DN 129:45325

TI Liquid pharmaceutical compositions containing HIV protease inhibitors

IN Lipari, John; Al-Razzak, Laman A.; Ghosh, Soumojeet; Gao, Rong; Kaul, Dilip

PA Abbott Laboratories, USA

SO PCT Int. Appl., 72 pp.

CODEN: PIXXD2

DT Patent

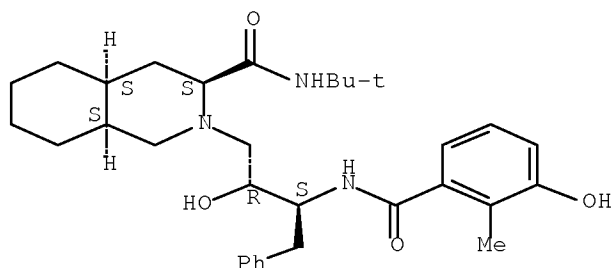
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9822106	A1	19980528	WO 1997-US20794	19971112 <--
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW			
	RW:	GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,			

GN, ML, MR, NE, SN, TD, TG				
ZA	9710071	A	19980525	ZA 1997-10071 19971107 <--
CA	2271196	C	19980528	CA 1997-2271196 19971112 <--
CA	2271196	A1	19980528	
CA	2505430	A1	19980528	CA 1997-2505430 19971112 <--
AU	9852573	A	19980610	AU 1998-52573 19971112 <--
AU	717546	B2	20000330	
EP	942721	A1	19990922	EP 1997-947510 19971112 <--
EP	942721	B1	20030122	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, FI, RO				
CN	1248914	A	20000329	CN 1997-199780 19971112 <--
BR	9714310	A	20000502	BR 1997-14310 19971112 <--
JP	2000515555	T	20001121	JP 1998-523751 19971112 <--
JP	3592337	B2	20041124	
HU	2000002932	A2	20010129	HU 2000-2932 19971112 <--
HU	2000002932	A3	20010328	
HU	224319	B1	20050728	
TR	9901129	T2	20010521	TR 1999-1129 19971112 <--
NZ	335002	A	20010831	NZ 1997-335002 19971112 <--
EP	1283041	A1	20030212	EP 2002-11533 19971112 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO				
AT	231393	T	20030215	AT 1997-947510 19971112 <--
PT	942721	T	20030630	PT 1997-947510 19971112 <--
IL	129300	A	20030706	IL 1997-129300 19971112
ES	2191862	T3	20030916	ES 1997-947510 19971112
PL	190185	B1	20051130	PL 1997-336980 19971112
SK	285022	B6	20060406	SK 1999-655 19971112
CN	1989963	A	20070704	CN 2005-10128757 19971112
CN	101103984	A	20080116	CN 2006-10101904 19971112
TW	475895	B	20020211	TW 1997-86117136 19971117 <--
NO	9902427	A	19990720	NO 1999-2427 19990520 <--
KR	2000057169	A	20000915	KR 1999-704469 19990520 <--
BG	64411	B1	20050131	BG 1999-103425 19990521
HK	1022441	A1	20031031	HK 2000-101651 20000317
AU	757970	B2	20030313	AU 2000-39414 20000609 <--
JP	2004346077	A	20041209	JP 2004-163024 20040601
PRAI	US 1996-754390	A	19961121	
	AU 1998-52573	A3	19971112	
	CA 1997-2271196	A3	19971112	
	CN 1997-199780	A3	19971112	
	CN 2008-10128757	A3	19971112	
	EP 1997-947510	A3	19971112	
	JP 1998-523751	A3	19971112	
	WO 1997-US20794	W	19971112	
AB	A liquid pharmaceutical composition providing improved oral bioavailability is disclosed for compds. which are inhibitors of HIV protease. In particular, the composition comprises a solution in a pharmaceutically acceptable organic solvent of (a) the HIV protease inhibitor and optionally, (b) a surfactant. The composition can optionally be encapsulated in either hard gelating capsules or soft elastic capsules (SEC). A capsule composition was prepared containing ritonavir 20, ethanol 10, oleic acid 69.99, and BHT 0.01% by weight			
IT	168898-57-5 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (liquid pharmaceutical compns. containing HIV protease inhibitors)			
RN	168898-57-5 CAPLUS			
CN	3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3S)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-phenylbutyl]-, (3S,4aS,8aS)- (CA INDEX NAME)			

Absolute stereochemistry. Rotation (-).



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 1997:720276 CAPLUS Full-text  
DN 127:302916  
TI Viracept (Nelfinavir Mesylate, AG1343): A Potent, Orally Bioavailable Inhibitor of HIV-1 Protease  
AU Kaldor, Stephen W.; Kalish, Vincent J.; Davies, Jay F., II; Shetty, Bhasker V.; Fritz, James E.; Appelt, Krzysztof; Burgess, Jeffrey A.; Campanale, Kristina M.; Chirgadze, Nickolay Y.; Clawson, David K.; Dressman, Bruce A.; Hatch, Steven D.; Khalil, Deborah A.; Kosa, Maha B.; Lubbehusen, Penny P.; Muesing, Mark A.; Patick, Amy K.; Reich, Siegfried H.; Su, Kenneth S.; Tatlock, John H.  
CS Agouron Pharmaceuticals Inc., San Diego, CA, 92121, USA  
SO Journal of Medicinal Chemistry (1997), 40(24), 3979-3985  
CODEN: JMCMAR; ISSN: 0022-2623  
PB American Chemical Society  
DT Journal  
LA English  
AB Using a combination of iterative structure-based design and an anal. of oral pharmacokinetics and antiviral activity, AG1343 (Viracept, nelfinavir mesylate), a nonpeptidic inhibitor of HIV-1 protease, was identified. AG1343 is a potent enzyme inhibitor ( $K_i = 2$  nM) and antiviral agent (HIV-1 ED<sub>50</sub> = 14 nM). An X-ray cocrystal structure of the enzyme-AG1343 complex reveals how the novel thiophenyl ether and phenol-amide substituents of the inhibitor interact with the S1 and S2 subsites of HIV-1 protease, resp. In vivo studies indicate that AG1343 is well absorbed orally in a variety of species and possesses favorable pharmacokinetic properties in humans. AG1343 (Viracept) has recently been approved for marketing for the treatment of AIDS.  
IT 169104-89-6P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of and HIV-1 protease inhibition by viracept and analogs)  
RN 169104-89-6 CAPLUS  
CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-phenylbutyl]-, [3S-[2(2S\*,3R\*),3 $\alpha$ ,4 $\alpha$ ,8 $\alpha$ ]]-, monomethanesulfonate (salt) (9CI) (CA INDEX NAME)

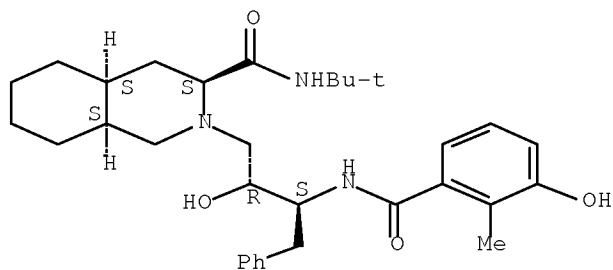
CM 1

CRN 168898-57-5

10/564,557

CMF C32 H45 N3 O4

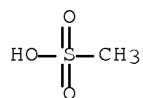
Absolute stereochemistry. Rotation (-).



CM 2

CRN 75-75-2

CMF C H4 O3 S



IT 168898-57-SP

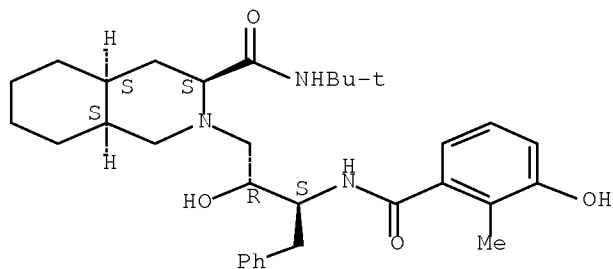
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of and HIV-1 protease inhibition by viracept and analogs)

RN 168898-57-5 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3S)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-phenylbutyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1996:106715 CAPLUS [Full-text](#)

DN 124:317888  
 TI Aromatic and heterocyclic amides as HIV protease inhibitors  
 IN Dressman, Bruce A.; Fritz, James E.; Hammond, Marlys; Hornback, William J.; Kaldor, Stephen W.; Kalish, Vincent J.; Munroe, John E.; Reich, Siegfried H.; Tatlock, John H.; et al.  
 PA Agouron Pharmaceuticals, Inc., USA  
 SO U.S., 78 pp. Cont.-in-part of U.S. Ser. No. 133,543, abandoned.  
 CODEN: USXXAM

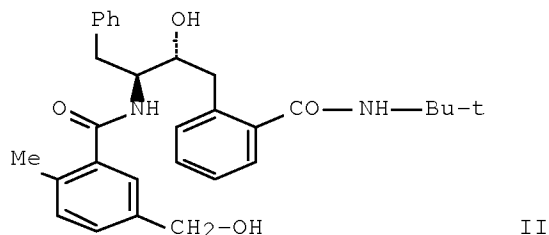
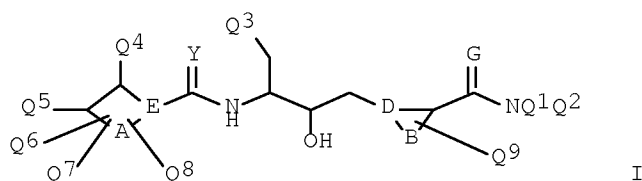
DT Patent  
 LA English  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5484926	A	19960116	US 1994-190764	19940202 <--
	ZA 9407815	A	19960708	ZA 1994-7815	19941006 <--
	CA 2173328	A1	19950413	CA 1994-2173328	19941007 <--
	CA 2173328	C	19990831		
	CA 2268709	A1	19950413	CA 1994-2268709	19941007 <--
	WO 9509843	A1	19950413	WO 1994-US11307	19941007 <--
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN				
	RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9479674	A	19950501	AU 1994-79674	19941007 <--
	AU 694746	B2	19980730		
	EP 722439	A1	19960724	EP 1994-930609	19941007 <--
	EP 722439	B1	20020814		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	CN 1131942	A	19960925	CN 1994-193534	19941007 <--
	CN 1046269	B	19991110		
	JP 09501443	T	19970210	JP 1994-511006	19941007 <--
	JP 2951724	B2	19990920		
	BR 9407782	A	19970318	BR 1994-7782	19941007 <--
	HU 75652	A2	19970528	HU 1996-908	19941007 <--
	EP 889036	A1	19990107	EP 1998-113006	19941007 <--
	EP 889036	B1	20041229		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT				
	RU 2139280	C1	19991010	RU 1996-109378	19941007 <--
	CZ 290417	B6	20020717	CZ 1996-1004	19941007 <--
	AT 222240	T	20020815	AT 1994-930609	19941007 <--
	PT 722439	T	20021231	PT 1994-930609	19941007 <--
	ES 2181725	T3	20030301	ES 1994-930609	19941007 <--
	PL 185647	B1	20030630	PL 1994-313871	19941007 <--
	EP 1340744	A2	20030903	EP 2003-11749	19941007
	EP 1340744	A3	20031203		
	EP 1340744	B1	20070523		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT				
	RO 119363	B1	20040830	RO 1996-738	19941007
	SK 284116	B6	20040908	SK 2002-493	19941007
	SK 284115	B6	20040908	SK 1996-439	19941007
	AT 286025	T	20050115	AT 1998-113006	19941007
	PT 889036	T	20050531	PT 1998-113006	19941007
	ES 2236849	T3	20050716	ES 1998-113006	19941007
	AT 362918	T	20070615	AT 2003-11749	19941007
	ES 2287387	T3	20071216	ES 2003-11749	19941007



10/564,557

IL 125098	A	20000131	IL 1994-125098	19941031 <--
IL 111472	A	20000601	IL 1994-111472	19941031 <--
TW 432049	B	20010501	TW 1994-83110782	19941119 <--
US 5824688	A	19981020	US 1995-473363	19950607 <--
US 5827858	A	19981027	US 1995-478020	19950607 <--
US 5827891	A	19981027	US 1995-478599	19950607 <--
US 5827859	A	19981027	US 1995-478934	19950607 <--
US 5834467	A	19981110	US 1995-482504	19950607 <--
US 5837710	A	19981117	US 1995-479765	19950607 <--
US 5846993	A	19981208	US 1995-481833	19950607 <--
US 5852043	A	19981222	US 1995-484706	19950607 <--
US 5859002	A	19990112	US 1995-474138	19950607 <--
US 5952343	A	19990914	US 1995-481831	19950607 <--
US 6271235	B1	20010807	US 1995-478600	19950607 <--
FI 9601449	A	19960529	FI 1996-1449	19960329 <--
NO 9601382	A	19960409	NO 1996-1382	19960403 <--
NO 307050	B1	20000131		
HK 1013650	A1	20030509	HK 1998-114956	19981223 <--
HK 1014950	A1	20050506	HK 1999-100152	19990114
JP 11310573	A	19991109	JP 1999-67231	19990204 <--
JP 3703647	B2	20051005		
US 6162812	A	20001219	US 1999-283152	19990401 <--
CN 1262272	A	20000809	CN 1999-105164	19990426 <--
US 20020077338	A1	20020620	US 2001-885056	20010621 <--
US 6525215	B2	20030225		
US 20030216569	A1	20031120	US 2002-300638	20021121
US 6693199	B2	20040217		
HK 1056172	A1	20071012	HK 2003-108464	20031120
PRAI US 1993-133543	B2	19931007		
US 1993-133696	B2	19931007		
US 1992-995621	B2	19921222		
US 1993-137254	B2	19931018		
US 1994-190764	A	19940202		
CA 1994-2173328	A3	19941007		
EP 1994-930609	A3	19941007		
EP 1998-113006	A3	19941007		
JP 1995-511006	A3	19941007		
WO 1994-US11307	W	19941007		
IL 1994-111472	A3	19941031		
US 1995-481831	A1	19950607		
US 1999-283152	A1	19990401		
US 2000-663348	A3	20000915		
US 2001-885056	A3	20010621		
OS MARPAT 124:317888				
GI				



AB HIV protease inhibitors I wherein: Q1 and Q2 are independently H, (un)substituted alkyl and aryl, and Q1 and Q2 may form a ring with G; Q3 = e.g., mercapto, (un)substituted alkoxy, aryloxy, thioether, amino, heterocycle, aryl; Q4-Q8 are independently, e.g., H, OH, mercapto, nitro, halo; Y and G are independently O, NH, N-alkyl, S, Se, two H atoms; D is C or N; E is C or N; Q9 = e.g., H, halo, OH, mercapto; the A and B rings are carbocyclic or heterocyclic; obtainable by chemical synthesis, inhibit or block the biol. activity of the HIV protease enzyme, causing the replication of the HIV virus to terminate. These compds., as well as pharmaceutical compns. that contain these compds. and optionally other anti-viral agents as active ingredients, are suitable for treating patients or hosts infected with the HIV virus, which is known to cause AIDS. Thus, e.g., amide coupling of [2R-(2R\*,3S\*)]-N-t-butyl-2-(3-amino-2-hydroxy-4-phenylbutyl)benzamide (preparation given) with 2-methyl-5-hydroxymethyl benzoic acid (preparation given) afforded [2'R-(2'R\*,3'S\*)]-N-t-butyl-2-[2'-hydroxy-3'-phenylmethyl-4'-aza-5'-oxo-5'-(2"-methyl-5"-hydroxymethylphenyl)pentyl]benzamide (II) which inhibited HIV-1 protease in the fluorescence assay with IC<sub>50</sub> = 0.006 µg/mL. Pharmaceutical formulations were given.

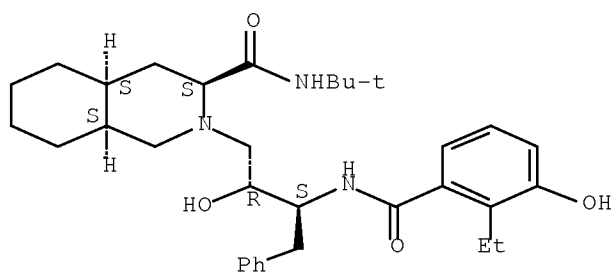
IT 168898-48-4P 168898-57-5P 168898-65-5P  
168898-66-6P 168898-67-7P 169104-88-5P  
169104-89-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(aromatic and heterocyclic amides as HIV protease inhibitors)

RN 168898-48-4 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)-2-[3-[(2-ethyl-3-hydroxybenzoyl)amino]-2-hydroxy-4-phenylbutyl]decahydro-,  
[3S-[2(2S\*,3R\*),3α,4αβ,8αβ]]- (9CI) (CA INDEX NAME)

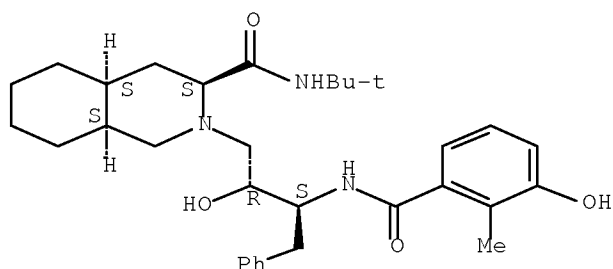
Absolute stereochemistry. Rotation (-).



RN 168898-57-5 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3S)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-phenylbutyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

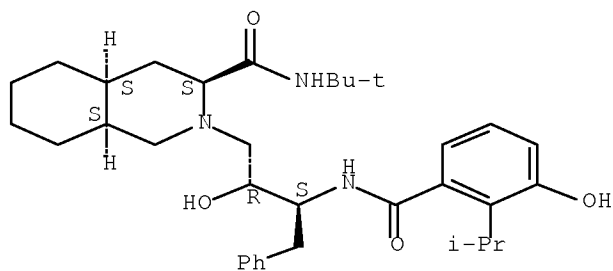
Absolute stereochemistry. Rotation (-).



RN 168898-65-5 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[2-hydroxy-3-[[3-hydroxy-2-(1-methylethyl)benzoyl]amino]-4-phenylbutyl]-, [3S-[2(2S\*,3R\*),3α,4αβ,8αβ]]- (9CI) (CA INDEX NAME)

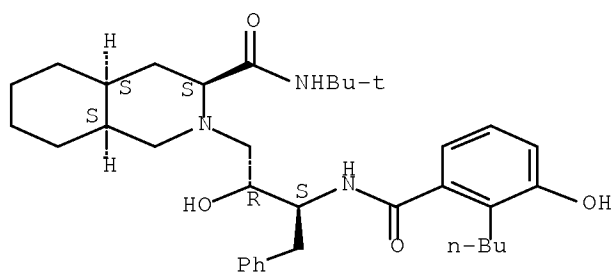
Absolute stereochemistry. Rotation (-).



RN 168898-66-6 CAPLUS

CN 3-Isoquinolinecarboxamide, 2-[3-[(2-butyl-3-hydroxybenzoyl)amino]-2-hydroxy-4-phenylbutyl]-N-(1,1-dimethylethyl)decahydro-, [3S-[2(2S\*,3R\*),3α,4αβ,8αβ]]- (9CI) (CA INDEX NAME)

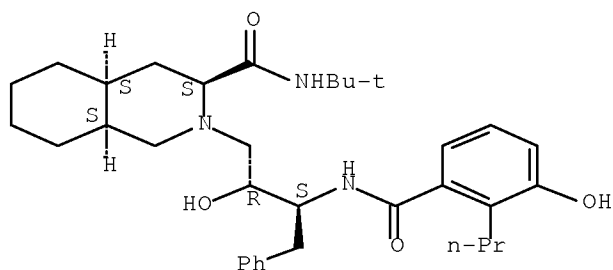
Absolute stereochemistry. Rotation (-).



RN 168898-67-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[2-hydroxy-3-[(3-hydroxy-2-propylbenzoyl)amino]-4-phenylbutyl]-, [3S-[2(2S\*,3R\*),3 $\alpha$ ,4 $\alpha\beta$ ,8 $\alpha\beta$ ]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 169104-88-5 CAPLUS

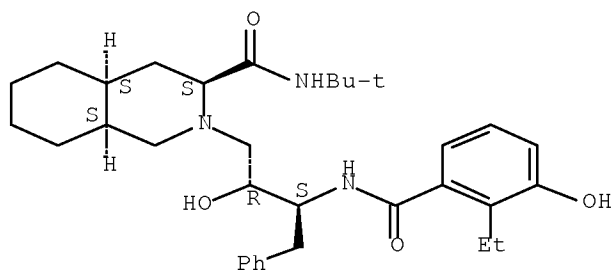
CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)-2-[3-[(2-ethyl-3-hydroxybenzoyl)amino]-2-hydroxy-4-phenylbutyl]decahydro-, [3S-[2(2S\*,3R\*),3 $\alpha$ ,4 $\alpha\beta$ ,8 $\alpha\beta$ ]]-, monomethanesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 168898-48-4

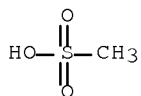
CMF C33 H47 N3 O4

Absolute stereochemistry. Rotation (-).



CM 2

CRN 75-75-2  
CMF C H4 O3 S

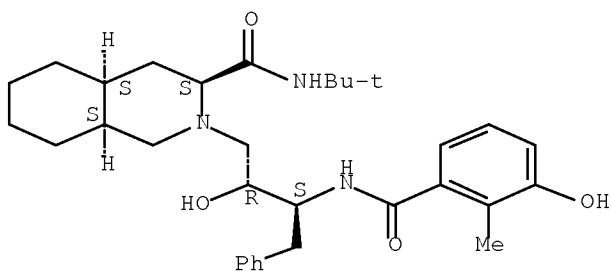


RN 169104-89-6 CAPLUS  
CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-phenylbutyl]-, [3S-[2(2S\*,3R\*),3 $\alpha$ ,4 $\alpha$ ,8 $\alpha$ ]]-, monomethanesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

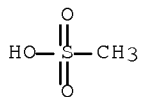
CRN 168898-57-5  
CMF C32 H45 N3 O4

Absolute stereochemistry. Rotation (-).



CM 2

CRN 75-75-2  
CMF C H4 O3 S



L5 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 1995:994185 CAPLUS Full-text  
DN 124:87033  
TI Preparation of HIV protease inhibitors and their (aminohydroxyalkyl)piperazine intermediates.  
IN Jungheim, Louis Nickolaus; Shepherd, Timothy Alan  
PA Eli Lilly and Co., USA

SO PCT Int. Appl., 133 pp.

CODEN: PIXXD2

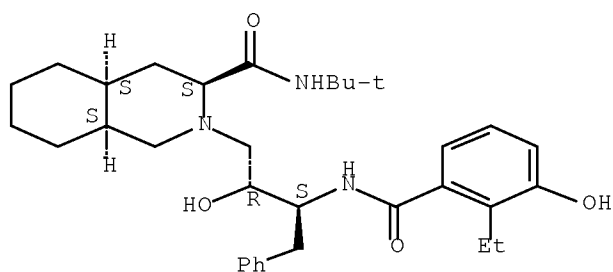
DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9521164	A1	19950810	WO 1994-US11352	19941006 <--
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN				
	RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 5461154	A	19951024	US 1994-190630	19940202 <--
	CA 2180860	A1	19950810	CA 1994-2180860	19941006 <--
	AU 9479304	A	19950821	AU 1994-79304	19941006 <--
	EP 741719	A1	19961113	EP 1994-930064	19941006 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	HU 76285	A2	19970728	HU 1996-2105	19941006 <--
	BR 9408530	A	19970805	BR 1994-8530	19941006 <--
	JP 09509657	T	19970930	JP 1994-520584	19941006 <--
PRAI	US 1994-190630	A	19940202		
	WO 1994-US11352	W	19941006		
OS	MARPAT 124:87033				
GI	For diagram(s), see printed CA Issue.				
AB	Intermediates [I; R = alkyl, pyridylmethyl; R1 = aryl, arylthio; R3 = CON(R4)2, Q1, Q2; p = 4, 5; R4 = H, alkyl, hydroxyalkyl; R5, R6 = H, OH, alkyl, alkoxy, hydroxyalkyl], were prepared by (a) reduction of pyrazines (II) to give piperazines, (b) alkylation of the piperazines to give intermediates (III), (c) alkylation of III with (IV; R11 = protecting group), and (d) optional deprotection. Thus, pyrazine-2-carboxylic acid in DMF/THF was treated with carbonyldiimidazole and then with Me3CNH2 to give 95% pyrazine 2-N-tert-butylcarboxamide. The latter in EtOH was hydrogenated at 60 psi and 40° overnight to give 95% piperazine 2-N-tert-butylcarboxamide. This in H2O/MeCN was treated with K2CO3 and 3-chloromethylpyridine hydrochloride overnight to give 18% 4-(pyrid-3-ylmethyl)piperazine 2-N-tert-butylcarboxamide. Reflux of the latter compound with [1S-(1R*,1'R*)]-1-[(1'-N-benzoyloxycarbonylamino-2'-phenyl)ethyl]oxirane in Me2CHOH gave 26% [2S-(2R*,2S*,3'R*)]-1-[2'-hydroxy-3'-(N-benzoyloxycarbonylamino)-4'-phenylbutyl]-4-(pyrid-3'-ylmethyl)piperazine 2-N-tert-butylcarboxamide. [3S-(3R*,8aR*,2'S*,3'S*)]-2-[2'-hydroxy-3'-phenylthiomethyl-4'-aza-5'-(2'-methyl-3'-hydroxyphenyl)pentyl]decahydroisoquinoline 3-N-tert-butylcarboxamide (preparation given) inhibited HIV-1 protease with a normalized IC50 = 0.25 ng/mL.				
IT	168898-48-4P 168898-57-5P 168898-65-5P 168898-66-6P 168898-67-7P 169104-88-5P 169104-89-6P				
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of HIV protease inhibitors and their (aminohydroxyalkyl)piperazine intermediates)				
RN	168898-48-4 CAPLUS				
CN	3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)-2-[3-[(2-ethyl-3-hydroxybenzoyl)amino]-2-hydroxy-4-phenylbutyl]decahydro-, [3S-[2(2S*,3R*),3 $\alpha$ ,4 $\alpha$ ,8 $\alpha$ ]]-(9CI) (CA INDEX NAME)				

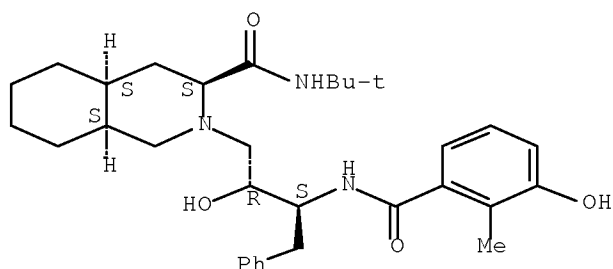
Absolute stereochemistry. Rotation (-).



RN 168898-57-5 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3S)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-phenylbutyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

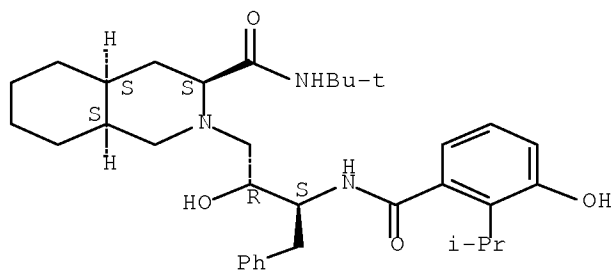
Absolute stereochemistry. Rotation (-).



RN 168898-65-5 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[2-hydroxy-3-[[3-hydroxy-2-(1-methylethyl)benzoyl]amino]-4-phenylbutyl]-, [3S-[2(2S\*,3R\*),3α,4αβ,8αβ]]- (9CI) (CA INDEX NAME)

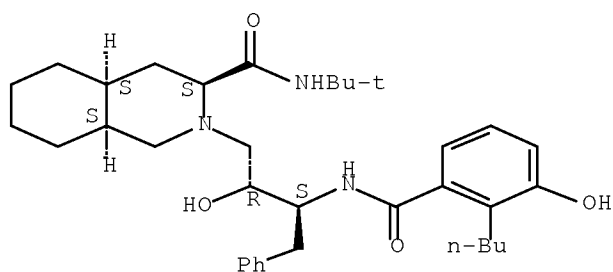
Absolute stereochemistry. Rotation (-).



RN 168898-66-6 CAPLUS

CN 3-Isoquinolinecarboxamide, 2-[3-[(2-butyl-3-hydroxybenzoyl)amino]-2-hydroxy-4-phenylbutyl]-N-(1,1-dimethylethyl)decahydro-, [3S-[2(2S\*,3R\*),3α,4αβ,8αβ]]- (9CI) (CA INDEX NAME)

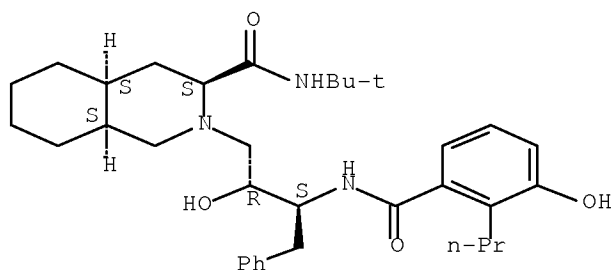
Absolute stereochemistry. Rotation (-).



RN 168898-67-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[2-hydroxy-3-[(3-hydroxy-2-propylbenzoyl)amino]-4-phenylbutyl]-, [3S-[2(2S\*,3R\*),3 $\alpha$ ,4 $\alpha\beta$ ,8 $\alpha\beta$ ]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 169104-88-5 CAPLUS

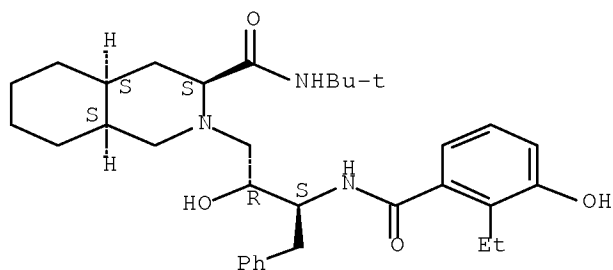
CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)-2-[3-[(2-ethyl-3-hydroxybenzoyl)amino]-2-hydroxy-4-phenylbutyl]decahydro-, [3S-[2(2S\*,3R\*),3 $\alpha$ ,4 $\alpha\beta$ ,8 $\alpha\beta$ ]]-, monomethanesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 168898-48-4

CMF C33 H47 N3 O4

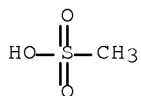
Absolute stereochemistry. Rotation (-).



CM 2



CRN 75-75-2  
CMF C H4 O3 S

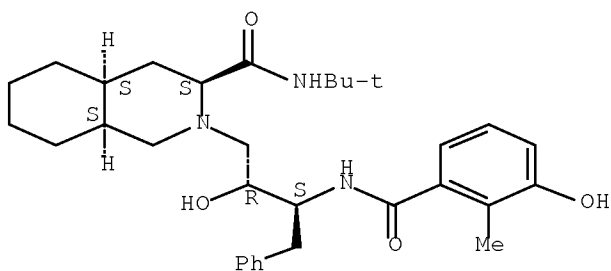


RN 169104-89-6 CAPLUS  
CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-phenylbutyl]-, [3S-[2(2S\*,3R\*),3 $\alpha$ ,4 $\alpha$ ,8 $\alpha$ ]]-, monomethanesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

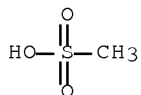
CRN 168898-57-5  
CMF C32 H45 N3 O4

Absolute stereochemistry. Rotation (-).



CM 2

CRN 75-75-2  
CMF C H4 O3 S



L5 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 1995:851692 CAPLUS Full-text  
DN 123:256539  
TI Preparation of arylheterocyclyl compounds as HIV protease inhibitors  
IN Dressman, Bruce A.; Fritz, James E.; Hammond, Marlys; Hornback, William J.; Kaldor, Stephen W.; Kalish, Vincent J.; Munroe, John E.; Reich, Siegfried Heinz; Tatlock, John H.; et al.

PA Agouron Pharmaceuticals, Inc., USA

SO PCT Int. Appl., 343 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9509843	A1	19950413	WO 1994-US11307	19941007 <--
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN				
	RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 5484926	A	19960116	US 1994-190764	19940202 <--
	ZA 9407815	A	19960708	ZA 1994-7815	19941006 <--
	AU 9479674	A	19950501	AU 1994-79674	19941007 <--
	AU 694746	B2	19980730		
	EP 722439	A1	19960724	EP 1994-930609	19941007 <--
	EP 722439	B1	20020814		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 09501443	T	19970210	JP 1994-511006	19941007 <--
	JP 2951724	B2	19990920		
	BR 9407782	A	19970318	BR 1994-7782	19941007 <--
	RU 2139280	C1	19991010	RU 1996-109378	19941007 <--
	MD 1507	F2	20000731	MD 1996-141	19941007 <--
	AT 222240	T	20020815	AT 1994-930609	19941007 <--
	PL 185647	B1	20030630	PL 1994-313871	19941007 <--
	RO 119363	B1	20040830	RO 1996-738	19941007
	SK 284116	B6	20040908	SK 2002-493	19941007
	SK 284115	B6	20040908	SK 1996-439	19941007
	FI 9601449	A	19960529	FI 1996-1449	19960329 <--
	NO 9601382	A	19960409	NO 1996-1382	19960403 <--
	NO 307050	B1	20000131		
	HK 1013650	A1	20030509	HK 1998-114956	19981223 <--
PRAI	US 1993-133543	A	19931007		
	US 1993-133696	A	19931007		
	US 1994-190764	A	19940202		
	WO 1994-US11307	W	19941007		
OS	CASREACT 123:256539; MARPAT 123:256539				
GI	For diagram(s), see printed CA Issue.				
AB	Title compds I (Q1, Q2 = H, alkyl, aryl optionally substituted, Q1 and Q2 may form a ring with G; Q3 = HS, alkoxy, aryloxy, thioether, amino, alkyl, cycloalkyl all optionally substituted, saturated and partially saturated heterocyclyl; Q4-8 = H, HO, HS, O2N, halo, etc.; Y, G = O, HN, alkyl-N, S, Se, 2H; D, E = C, N, etc.; Q9 = H, halo, HO, HS, etc.; A, B = (substituted) carbocyclyl or heterocyclyl) or a salt thereof, are prepared To [3S-(3R,4aR,8aR,2'S,3'R)]-2-[3'-amino-2-hydroxy-4'-phenyl]butyldecahydroisoquinoline-3-N-tert-butylcarboxamide (preparation given), 2-fluoro-3-hydroxybenzoic acid (preparation given) and 1-hydroxybenzotriazole in THF was added 1,3-dicyclohexylcarbodiimide to give the title compound [3S-(3R,4aR,8aR,2'S,3'R)]-2-[2'-hydroxy-3'-phenylmethyl-4'-aza-5'-oxo-5'-(2"-fluoro-3"-hydroxyphenyl)pentyl]decahydro isoquinoline-3-N-tert-butylcarboxamide. HIV protease inhibition was demonstrated with I. Pharmaceutical formulations comprising I are given.				
IT	168898-48-4P 168898-57-5P 168898-65-5P 168898-66-6P 168898-67-7P 169104-88-5P 169104-89-6P				

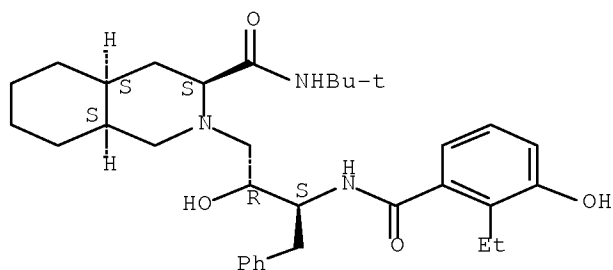
10/564,557

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of arylheterocyclyl compds. as HIV protease inhibitors)

RN 168898-48-4 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)-2-[3-[(2-ethyl-3-hydroxybenzoyl)amino]-2-hydroxy-4-phenylbutyl]decahydro-,  
[3S-[2(2S\*,3R\*),3 $\alpha$ ,4 $\alpha$  $\beta$ ,8 $\alpha$  $\beta$ ]]- (9CI) (CA INDEX NAME)

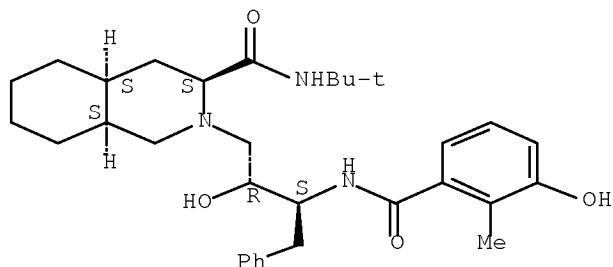
Absolute stereochemistry. Rotation (-).



RN 168898-57-5 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3S)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-phenylbutyl]-,  
(3S,4aS,8aS)- (CA INDEX NAME)

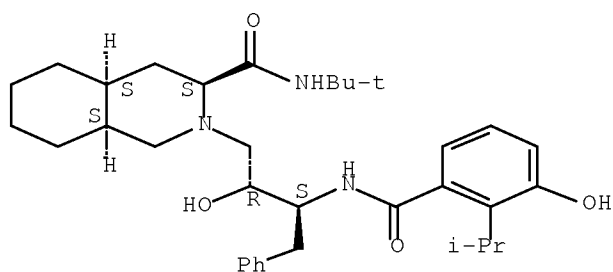
Absolute stereochemistry. Rotation (-).



RN 168898-65-5 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[2-hydroxy-3-[[3-hydroxy-2-(1-methylethyl)benzoyl]amino]-4-phenylbutyl]-,  
[3S-[2(2S\*,3R\*),3 $\alpha$ ,4 $\alpha$  $\beta$ ,8 $\alpha$  $\beta$ ]]- (9CI) (CA INDEX NAME)

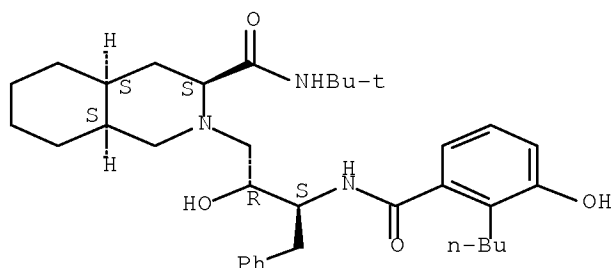
Absolute stereochemistry. Rotation (-).



RN 168898-66-6 CAPLUS

CN 3-Isoquinolinecarboxamide, 2-[3-[(2-butyl-3-hydroxybenzoyl)amino]-2-hydroxy-4-phenylbutyl]-N-(1,1-dimethylethyl)decahydro-, [3S-[2(2S\*,3R\*), 3α, 4αβ, 8αβ]]- (9CI) (CA INDEX NAME)

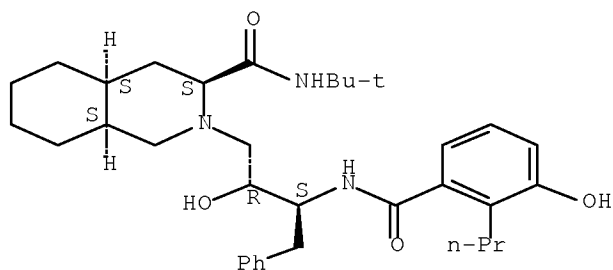
Absolute stereochemistry. Rotation (-).



RN 168898-67-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[2-hydroxy-3-[(3-hydroxy-2-propylbenzoyl)amino]-4-phenylbutyl]-, [3S-[2(2S\*,3R\*), 3α, 4αβ, 8αβ]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 169104-88-5 CAPLUS

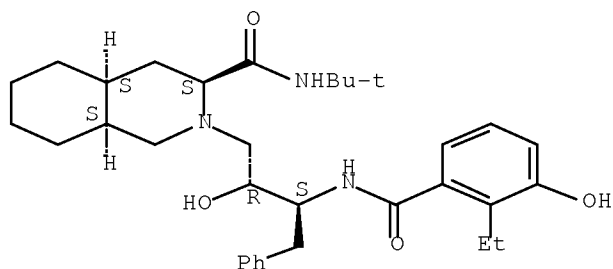
CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)-2-[3-[(2-ethyl-3-hydroxybenzoyl)amino]-2-hydroxy-4-phenylbutyl]decahydro-, [3S-[2(2S\*,3R\*), 3α, 4αβ, 8αβ]]-, monomethanesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

10/564,557

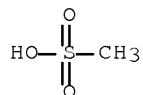
CRN 168898-48-4  
CMF C33 H47 N3 O4

Absolute stereochemistry. Rotation (-).



CM 2

CRN 75-75-2  
CMF C H4 O3 S

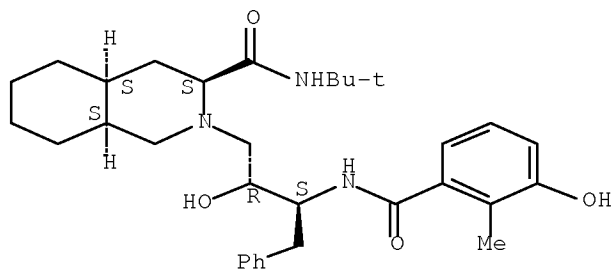


RN 169104-89-6 CAPLUS  
CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[2-hydroxy-3-  
[(3-hydroxy-2-methylbenzoyl)amino]-4-phenylbutyl]-, [3S-  
[2(2S\*,3R\*),3 $\alpha$ ,4 $\alpha$ ,8 $\alpha$ ]]-, monomethanesulfonate (salt)  
(9CI) (CA INDEX NAME)

CM 1

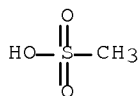
CRN 168898-57-5  
CMF C32 H45 N3 O4

Absolute stereochemistry. Rotation (-).



CM 2

CRN 75-75-2  
CMF C H4 O3 S

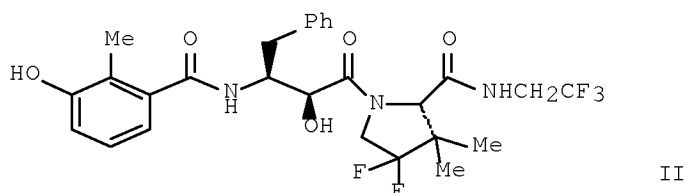
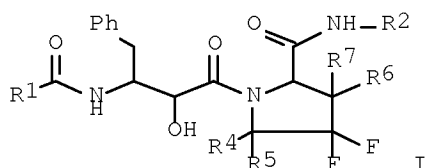


=> s 14 not 15  
L6 1 L4 NOT L5

=> dis 16 bib abs fhitstr

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2004:857219 CAPLUS Full-text  
DN 141:314632  
TI Preparation of amino acid amides as HIV protease inhibitors  
IN Kucera, David John; Scott, Robert William  
PA Agouron Pharmaceuticals, Inc., USA  
SO U.S. Pat. Appl. Publ., 296 pp., Cont.-in-part of U.S. Ser. No. 166,979.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20040204591	A1	20041014	US 2003-729645	20031204
	US 7094909	B2	20060822		
	US 20030225071	A1	20031204	US 2002-166979	20020611
	US 7179918	B2	20070220		
	EP 1739082	A1	20070103	EP 2006-20180	20020611
	R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR, AL, LT, LV, MK, RO, SI				
	ZA 2003009041	A	20040722	ZA 2003-9041	20031120
	ZA 2003009040	A	20050527	ZA 2003-9040	20031120
	US 20070021354	A1	20070125	US 2006-450943	20060609
	AU 2006235964	A1	20061130	AU 2006-235964	20061110
PRAI	US 2001-297460P	P	20010611		
	US 2001-297729P	P	20010611		
	US 2002-166979	A2	20020611		
	AU 2002-345644	A3	20020611		
	EP 2002-744295	A3	20020611		
OS	MARPAT 141:314632				
GI					



AB Synthetic amides I [R1 is a 5- or 6-membered monocyclic carbo- or heterocyclic ring which is optionally substituted by alkyl, hydroxyl, alkylcarbonyloxy, arylcarbonyloxy or heteroarylcarbonyloxy; R2 is haloalkyl; R4-R7 are H or alkyl] or their pharmaceutically-active salts, metabolites or prodrugs are useful as inhibitors of the HIV protease enzyme. Thus, pyrrolidinecarboxamide derivative II was prepared via amidation reactions. A combinatorial chemical approach to HIV protease inhibitors was also presented.

IT 478698-82-7P

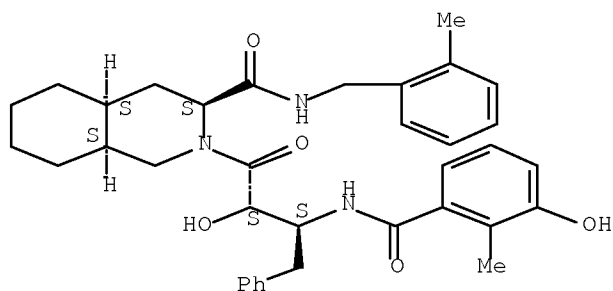
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amino acid amides as HIV protease inhibitors)

RN 478698-82-7 CAPLUS

CN 3-Isoquinolinecarboxamide, decahydro-2-[(2S,3S)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-1-oxo-4-phenylbutyl]-N-[(2-methylphenyl)methyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

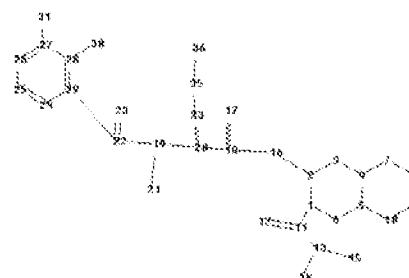
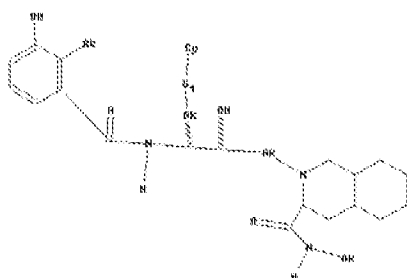
Absolute stereochemistry.



RE.CNT 78 THERE ARE 78 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file reg

=> Uploading C:\Program Files\Stnexp\Queries\Queries\33110564557.str



```

chain nodes :
11 12 13 14 15 16 17 18 19 20 21 22 23 30 31 33 35 36
ring nodes :
1 2 3 4 5 6 7 8 9 10 24 25 26 27 28 29
chain bonds :
1-11 2-16 11-12 11-13 13-14 13-15 16-18 17-18 18-20 19-20 19-21 19-22
20-33 22-23 22-29 27-31 28-30 33-35 35-36
ring bonds :
1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-10 7-8 8-9 9-10 24-25 24-29 25-26 26-27
27-28 28-29
exact/norm bonds :
1-2 1-6 2-3 2-16 3-4 4-5 4-7 5-6 5-10 7-8 8-9 9-10 11-12 11-13 13-15
16-18 17-18 19-20 19-22 20-33 22-23 27-31 28-30 33-35 35-36
exact bonds :
1-11 13-14 18-20 19-21 22-29
normalized bonds :
24-25 24-29 25-26 26-27 27-28 28-29
isolated ring systems :
containing 1 : 24 :
```

G1:O,S,N

Match level :

```

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS
19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:Atom 25:Atom 26:Atom
27:Atom 28:Atom 29:Atom 30:CLASS 31:CLASS 33:CLASS 35:CLASS 36:Atom
```

```

=> s 17 sam
L8          2 SEA SSS SAM L7
```

```

=> s 17 full
L9          33 SEA SSS FUL L7
```

=> file caplus

```

=> s 19
L10         2032 L9
```

```

=> s 110 and pd< july 2003
    23779907 PD< JULY 2003
```



(PD&lt;20030700)

L11 1028 L10 AND PD&lt; JULY 2003

=&gt; s l11 and anticoronavirus

1 ANTICORONAVIRUS

L12 0 L11 AND ANTICORONAVIRUS

=&gt; s l11 and sars

4507 SARS

L13 0 L11 AND SARS

=&gt; s l11 and coroavirus

1 COROAVIRUS

L14 0 L11 AND COROAVIRUS

=&gt; dis l11 500-525 bib abs hitstr

L11 ANSWER 500 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:861052 CAPLUS Full-text

DN 136:193703

TI Effect of combination therapy including protease inhibitors on mortality among children and adolescents infected with HIV-1

AU Gortmaker, Steven L.; Hughes, Michael; Cervia, Joseph; Brady, Michael; Johnson, George M.; Seage, George R., III; Song, Lin Ye; Dankner, Wayne M.; Oleske, James M.

CS Pediatric AIDS Clinical Trials Group Protocol 219 Team, Center Biostatistics AIDS Res., Harvard Sch. Public Health, Boston, MA, USA

SO New England Journal of Medicine (2001), 345(21), 1522-1528

CODEN: NEJMAG; ISSN: 0028-4793

PB Massachusetts Medical Society

DT Journal

LA English

AB Combination therapy including protease inhibitors has been shown to be effective in treating adults infected with human immunodeficiency virus type 1 (HIV-1), but there are only limited data regarding the treatment of children and adolescents. A cohort of 1028 HIV-1-infected children and adolescents, from birth through 20 yr of age, who were enrolled in research clinics in the United States before 1996 was followed prospectively through 1999. We used proportional-hazards regression models to estimate the effect on mortality of combination therapy including protease inhibitors. Seven percent of the subjects were receiving combination therapy including protease inhibitors in 1996; by 1999, 73 % were receiving such therapy. In univariate analyses, a higher base-line percentage of lymphocytes that were CD4-pos., a higher weight for age, a higher height for age, black race, Hispanic ethnic background, younger age, and perinatally acquired infection were associated with a longer median time to the initiation of this type of therapy ( $P < 0.001$ ). After adjustment for covariates, the differences among racial and ethnic groups in the time to initiation were not statistically significant. Mortality declined from 5.3% in 1996 to 2.1% in 1997; 0.9% in 1998, and 0.7% in 1999 ( $P$  for trend  $< 0.001$ ). There were redns. in mortality in all sub-groups defined according to age, sex, percentage of CD4+ lymphocytes, educational level of the parent or guardian, and race or ethnic background. In adjusted analyses, the initiation of combination therapy including protease inhibitors was independently associated with reduced mortality (hazard ratio for death, 0.33; 95 % confidence interval, 0.19 to 0.58;  $P < 0.001$ ). The use of combination therapy including protease inhibitors has markedly reduced mortality among children and adolescents infected with HIV-1.

IT 159989-64-7, Nelfinavir

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

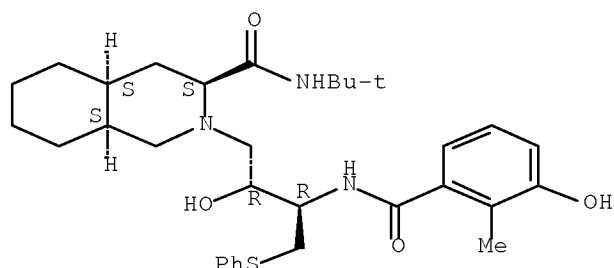
(effect of combination therapy including protease inhibitors on

mortality among human children and adolescents infected with HIV-1)

RN 159989-64-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 501 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:845561 CAPLUS Full-text

DN 136:337596

TI Genotypic and phenotypic evidence of different drug-resistance mutation patterns between B and non-B subtype isolates of human immunodeficiency virus type 1 found in Brazilian patients failing HAART

AU Caride, Elena; Hertogs, Kurt; Larder, Brendan; Dehertogh, Pascale; Brindeiro, Rodrigo; Machado, Elizabeth; De Sa, Carlos A. M.; Eyer-Silva, Walter A.; Sion, Fernando Samuel; Passioni, Luiz F. C.; Menezes, Jaqueline A.; Calazans, Alexandre R.; Tanuri, Amilcar

CS Laboratory of Molecular Virology, Genetic Department, UFRJ, Rio de Janeiro, CEP: 21944-970, Brazil

SO Virus Genes (2001), 23(2), 193-202

CODEN: VIGEET; ISSN: 0920-8569

PB Kluwer Academic Publishers

DT Journal

LA English

AB We have investigated the phenotypic and genotypic susceptibility of 14 HIV-1 strains isolated from individuals failing HAART therapy to protease inhibitors (PI). Proviral and plasma viral pol gene fragment were amplified, sequenced and subtyped. Nine samples clustered with protease subtype B reference strains and the remaining samples were classified as non-B subtype corresponding to subtype F (n=4) and subtype A (n=1). Although all patients were treated with similar PI drug regimen, the non-B subtype isolates did not present the L90M and 184V mutations and used mainly G48V and V82A/F to achieve drug resistance. A strong crossresistance phenotype among all four PI was associated with the mutation L90M in the subtype-B isolates, and with G48V and V82A/F in the non-B counterparts. This observation revealed that the non-B viruses tested had specific genotypic characteristics contrasting with the subtype-B isolates.

IT 159989-64-7, Nelfinavir

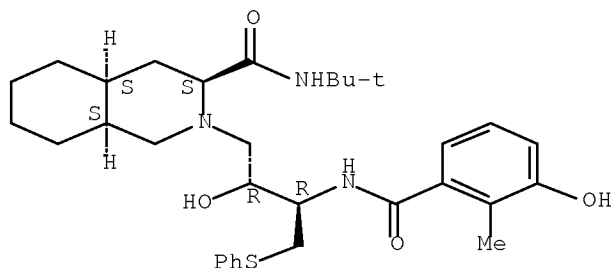
RL: PAC (Pharmacological activity); BIOL (Biological study)

(genotypic and phenotypic evidence of different drug-resistance mutation patterns between B and non-B subtype isolates of HIV-1 found in Brazilian patients failing HAART)

RN 159989-64-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 502 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:841654 CAPLUS [Full-text](#)

DN 136:144718

TI Improvement of HAART-associated insulin resistance and dyslipidemia after replacement of protease inhibitors with abacavir

AU Walli, R.; Michl, G. M.; Bogner, J. R.; Goebel, F. D.

CS Medizinische Poliklinik, Universitat Munchen, Munchen, Germany

SO European Journal of Medical Research (2001), 6(10), 413-421

CODEN: EJMRFL; ISSN: 0949-2321

PB I. Holzapfel Publishers

DT Journal

LA English

AB Objective: To assess the effect of replacing protease inhibitors (PIs) with abacavir on insulin sensitivity and plasma lipids. Design: Pilot study including 31 patients with sustained virol. control on their first PI-containing HAART regimen. 16 Patients were switched from PIs to abacavir (ABC group), 15 patients continued on PIs (PI group). In all patients, nucleoside-analog reverse transcriptase inhibitors were continued. Methods: Insulin sensitivity (using an i.v. insulin tolerance test) and fasting total cholesterol and triglycerides were determined at baseline, month 3, 6, 9 and 12. Results: In the ABC group, there was a significant increase in median insulin sensitivity from baseline within 6 mo (+49  $\mu\text{mol/l/min}$ ), and a significant decrease in both triglycerides (-41 mg/dL) and cholesterol (-40 mg/dL) at month 3. These changes were sustained through month 12. In addition, a reversal of baseline insulin resistance, hypercholesterolemia and hypertriglyceridemia was observed in the majority of patients. In the PI group, no significant changes in insulin sensitivity, triglycerides and cholesterol were observed. There was a significant correlation between the changes in insulin sensitivity, triglycerides and cholesterol. Interpretation: Switching from PIs to abacavir is associated with an improvement of insulin sensitivity and a decrease of cholesterol and triglycerides in the majority of patients with HAART-associated metabolic alterations and therefore might be an alternative for patients to PI-containing HAART regimens.

IT 159989-64-7, Nelfinavir

RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

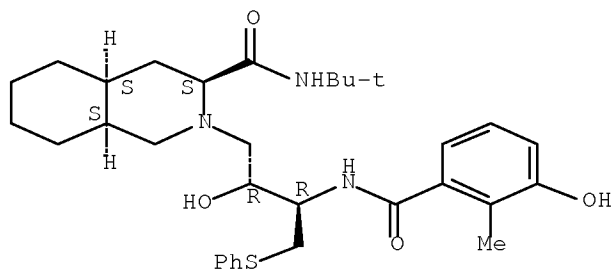
(improvement of HAART-associated insulin resistance and dyslipidemia after

replacement of protease inhibitors with abacavir in humans)

RN 159989-64-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 503 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:838939 CAPLUS Full-text

DN 136:144717

TI Interferon and ribavirin combination therapy for chronic hepatitis C in human immunodeficiency virus-infected patients with congenital coagulation disorders

AU Saucedo, Silvia; Juarez, Alberto; Esteban, Juan I.; Altisent, Carmen; Ruiz, Isabel; Puig, Lluís; Esteban, Rafael; Guardia, Jaime

CS Centre de Transfusió i Banc de Teixits, Servei Català de la Salut, Hospital Universitari Vall d'Hebron, Universitat Autònoma de Barcelona, Barcelona, 08035, Spain

SO Hepatology (Philadelphia, PA, United States) (2001), 34(5), 1035-1040

CODEN: HPTLD9; ISSN: 0270-9139

PB W. B. Saunders Co.

DT Journal

LA English

AB We have conducted an open, prospective trial to assess the safety and efficacy of interferon alfa-2b and ribavirin in combination for the treatment of chronic hepatitis C in human immunodeficiency virus (HIV)-infected hemophiliacs. Twenty hemophiliacs coinfecting with HIV and hepatitis C virus (HCV), 18 of them under highly active antiretroviral therapy (HAART), with a mean CD4+ cell count of  $490 \pm 176$  cells/mm<sup>3</sup> and undetectable ( $n = 9$ ) or low-level HIV RNA ( $<10,000$  copies/mL;  $n = 11$ ), were treated with interferon- $\alpha$ 2b (3 MU thrice weekly) and ribavirin (800 mg/d) for 6 or 12 mo according to virologic response. Patients were monitored for tolerance and response at 4, 8, 12, 24, 36, and 48 wk during treatment and every other month thereafter. All 20 patients enrolled completed at least 6 mo of treatment with no major side effect requiring treatment withdrawal, dose reduction, or modification of HAART. Overall, 8 patients (40%) achieved a sustained virologic response at the end of the 6-mo post-treatment follow-up. Sustained responders had lower baseline HCV-RNA levels ( $5.7 \pm 0.8$  vs.  $6.3 \pm 0.4$  log<sub>10</sub> IU/mL,  $P = .041$ ) but were otherwise similar to nonresponders. All sustained responders had a decrease in HCV-RNA level of at least 1 log per mo during the first 2 mo and undetectable levels at 6 mo. In conclusion, our results provide evidence that combination therapy with interferon and ribavirin is safe in HIV-infected

hemophiliacs with stable CD4 cell count and undetectable or low-level HIV replication, and leads to eradication of HCV in 40% of these patients.

IT 159989-64-7, Nelfinavir

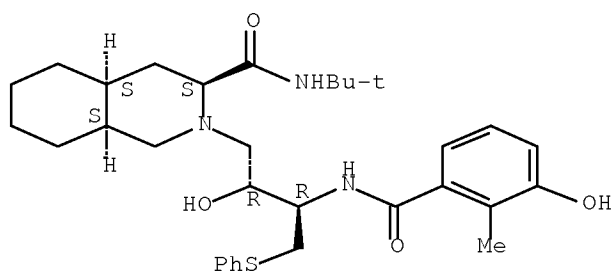
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(interferon and ribavirin combination therapy for chronic hepatitis C in HIV infected humans with congenital coagulation disorders)

RN 159989-64-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 504 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:838390 CAPLUS [Full-text](#)

DN 137:52200

TI Nelfinavir suspension obtained from nelfinavir tablets has equivalent pharmacokinetic profile

AU Regazzi, M. B.; Seminari, E.; Villani, P.; Carriero, P. L.; Montagna, M.; Marubbi, F.; Maserati, R.

CS Department of Pharmacology, I.R.C.C.S. Policlinico San Matteo, University of Pavia, Pavia, Italy

SO Journal of Chemotherapy (Firenze, Italy) (2001), 13(5), 569-574  
CODEN: JCHEEU; ISSN: 1120-009X

PB E.I.F.T. srl

DT Journal

LA English

AB The pharmacokinetics of nelfinavir tablets (A) and an oral simplified nelfinavir suspension (B) were studied. Twelve healthy volunteers randomly received either five 250-mg nelfinavir tablets or a simplified oral suspension obtained from tablets dissolved in water (nelfinavir 1250 mg in 100 mL of water) in a single dose before being crossed over to the second treatment after a one-week washout period. Blood samples were drawn up to 24 h after drug administration. Nelfinavir concns. in plasma were analyzed by a specific and validated reverse-phase high-performance liquid chromatog. assay (HPLC) with UV detection, and pharmacokinetic values were determined. For the  $AUC_{0-\infty}$  with means $\pm$ SD of  $31.71\pm 7.85$ ,  $30.88\pm 10.28$  ( $\mu$ g/L) resp. for treatments B and A, the ratio (FB/A) was of 1.1 with a C.I. of 0.90-1.24. For  $C_{max}$  with means $\pm$ SD of  $3.1\pm 0.6$  (treatment B) and  $3.2\pm 0.8$  mg/mL (treatment A), the ratio was 1.0. with C.I. of 0.92- 1.08. The two treatments evidenced no significant differences in  $AUC_{0-\infty}$  and  $C_{max}$  values and the two-one sided t-test showed that the two preps. are bioequivalent. There was no significant difference in  $T_{max}$  between the liquid and tablets. Nelfinavir suspension might be a option

for treating HIV-infected patients with swallowing disturbances or compliance problems.

IT 159989-64-7, Nelfinavir

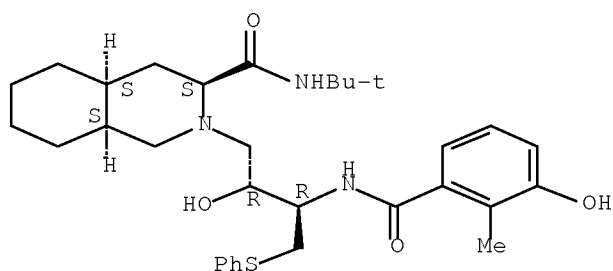
RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(nelfinavir suspension obtained from nelfinavir tablets has equivalent pharmacokinetic profile)

RN 159989-64-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 505 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:835754 CAPLUS Full-text

DN 136:133368

TI Pilot study of interferon- $\alpha$  with and without amantadine for the treatment of hepatitis C in HIV coinfecting individuals on antiretroviral therapy

AU Sax, H.; Friedl, A.; Renner, E.; Steuerwald, M. H.; Weber, R.

CS Swiss HIV Cohort Study, Division of Infectious Diseases, University of Geneva Hospital, Geneva, CH-1211, Switz.

SO Infection (Munich, Germany) (2001), 29(5), 267-270  
CODEN: IFTNAL; ISSN: 0300-8126

PB Urban & Vogel Medien und Medizin Verlagsgesellschaft mbH

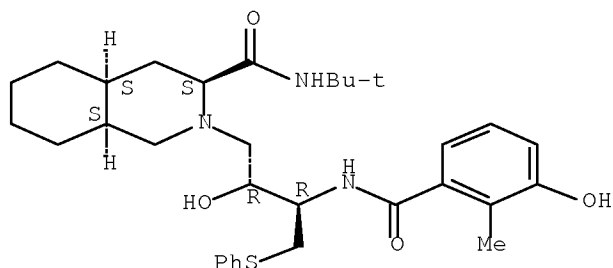
DT Journal

LA English

AB Concurrent potent therapy of hepatitis C (HCV) and HIV includes at least five antiviral drugs. Drug interactions, toxicity, tolerance and acceptance by patients of such treatment regimens are unknown. A prospective open randomized pilot trial was conducted to test interferon- $\alpha$  (6 million units/day for the 1st month followed by 6 million thrice weekly) and amantadine vs. interferon- $\alpha$  monotherapy for tolerability and feasibility among HIV and HCV co-infected patients on stable antiretroviral combination therapy. 1,013 HIV-infected patients were consecutively evaluated. 314 Were anti-HCV antibody pos.; only eight (2.4%) were eligible. Major reasons for exclusion were: normal transaminase levels (34%), ongoing i.v. drug use (33%), or recent change in antiretroviral therapy (31%). Study drugs were stopped in all of the seven patients enrolled because of side effects and/or failure of anti-HCV therapy. CD4 lymphocyte counts and HIV-1 RNA remained stable. Among patients on highly active antiretroviral therapy, the addition of interferon- $\alpha$  with or without amantadine was inefficient and poorly tolerated, but had no neg. influence on HIV infection. Eligibility for the study was unexpectedly low.

IT 159989-64-7, Nelfinavir  
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (INF- $\alpha$  with/without amantadine for treatment of hepatitis C in HIV-infected humans on antiretroviral therapy)  
 RN 159989-64-7 CAPLUS  
 CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



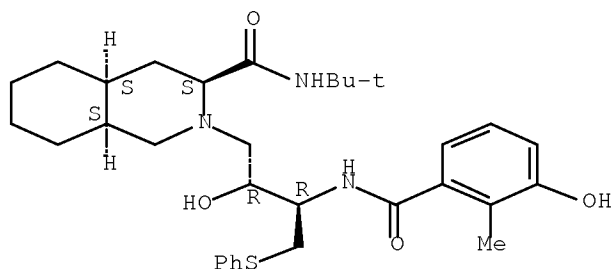
RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 506 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2001:834651 CAPLUS Full-text  
 DN 136:144710  
 TI A single-nucleotide polymorphism in the sterol-regulatory element-binding protein 1c gene is predictive of HIV-related hyperlipoproteinaemia  
 AU Miserez, Andre R.; Muller, Patrick Y.; Barella, Luca; Schwietert, Martin; Erb, Peter; Vernazza, Pietro L.; Battegay, Manuel  
 CS Swiss HIV Cohort Study, Cardiovascular Genetics, Department of Clinical-Biological Sciences, University of Basel, Basel, Switz.  
 SO AIDS (London, United Kingdom) (2001), 15(15), 2045-2049  
 CODEN: AIDSET; ISSN: 0269-9370  
 PB Lippincott Williams & Wilkins  
 DT Journal  
 LA English  
 AB A single-nucleotide polymorphism (3'322C/G) was identified in the gene encoding a key cholesterol/triglyceride regulator, sterol-regulatory element-binding protein 1c (SREBP-1c). Although it did not alter the amino acid sequence, SREBP-1c-3'322C/G was predictive of highly active antiretroviral therapy-related hyperlipoproteinemia. Increases in cholesterol were less frequently associated with homozygous SREBP-1c-3'322G (genotype 22) than with heterozygous/homozygous SREBP-1c-3'322C (genotypes 11/12) and correlated with leptin and insulin increases, particularly in genotype 11/12 carriers. A functional mutation linked to SREBP-1c-3'322C/G or mRNA conformation differences may explain our findings.  
 IT 159989-64-7, Nelfinavir  
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (single-nucleotide polymorphism in sterol-regulatory element-binding protein 1c gene is predictive of HIV-related hyperlipoproteinemia in humans)  
 RN 159989-64-7 CAPLUS  
 CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-

10/564,557

hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-,  
(3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 507 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:834648 CAPLUS [Full-text](#)

DN 136:144709

TI Fat distribution and metabolic changes are strongly correlated and energy expenditure is increased in the HIV lipodystrophy syndrome

AU Kosmiski, Lisa A.; Kuritzkes, Daniel R.; Lichtenstein, Kenneth A.; Glueck, Deborah H.; Gourley, Patrick J.; Stamm, Elizabeth R.; Scherzinger, Ann L.; Eckel, Robert H.

CS Division of Endocrinology, Metabolism and Diabetes, Department of Medicine, University of Colorado Health Sciences Center, Denver, CO, USA

SO AIDS (London, United Kingdom) (2001), 15(15), 1993-2000

CODEN: AIDSET; ISSN: 0269-9370

PB Lippincott Williams & Wilkins

DT Journal

LA English

AB To examine the relationships among protease inhibitor (PI) therapy, body fat distribution, and metabolic disturbances in the HIV lipodystrophy syndrome, a cross-sectional study was conducted in HIV primary care practices which included PI-treated patients with lipodystrophy (n = 14) and PI-treated (n = 13) and PI-naive (n = 5) patients without lipodystrophy. Body composition was assessed by phys. examination, dual-energy x-ray absorptiometry, and computed tomog. Insulin sensitivity (SI) was measured using the insulin-modified frequently sampled i.v. glucose tolerance test. Lipid profiles, other metabolic parameters, duration of HIV infection, CD4 lymphocyte counts, HIV-1 RNA load, and resting energy expenditure (REE) were also assessed. PI-treated patients with lipodystrophy were significantly less insulin-sensitive than PI-treated patients and PI-naive patients without any changes in fat distribution ( $SI(22) + 10^{-4}$  (min-1/ $\mu$ U/mL) vs.  $3.2 + 10^{-4}$  and  $4.6 + 10^{-4}$  (min-1/ $\mu$ U/mL), resp.;  $P < 0.001$ ). Visceral adipose tissue area and other measures of central adiposity correlated strongly with metabolic disturbances as did the percent of total body fat present in the extremities; visceral adipose tissue was an independent predictor of insulin sensitivity and high-d. lipoprotein cholesterol levels. REE per kg lean body mass was significantly higher in the group with lipodystrophy compared to the groups without lipodystrophy (36.9 vs. 31.5 and 29.4 kcal/kg lean body mass;  $P < 0.001$ ), and SI was strongly correlated with and was an independent predictor of REE in this population. Body fat distribution and metabolic disturbances are strongly correlated in the HIV lipodystrophy syndrome and REE is increased.

IT 159989-64-7, Nelfinavir

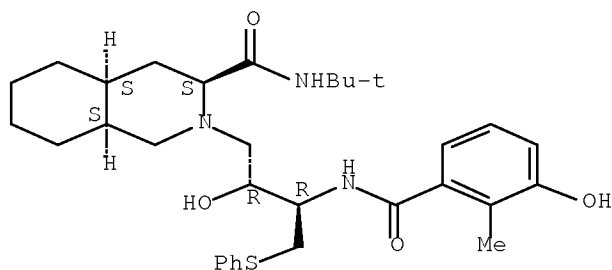


RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(fat distribution, metabolic changes, and increased energy expenditure  
in humans with HIV lipodystrophy syndrome)

RN 159989-64-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-  
hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-,  
(3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 508 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:834647 CAPLUS Full-text

DN 136:144708

TI Long-term quality of life outcomes in three antiretroviral treatment  
strategies for HIV-1 infection

AU Nieuwkerk, Pythia T.; Gisolf, Elisabeth H.; Reijers, Monique H. E.; Lange,  
Joep M. A.; Danner, Sven A.; Sprangers, Mirjam A. G.

CS NATIVE, PROMETHEUS and ADAM study groups, Department of Medical  
Psychology, Academic Medical Center, Amsterdam, Neth.

SO AIDS (London, United Kingdom) (2001), 15(15), 1985-1991  
CODEN: AIDSET; ISSN: 0269-9370

PB Lippincott Williams & Wilkins

DT Journal

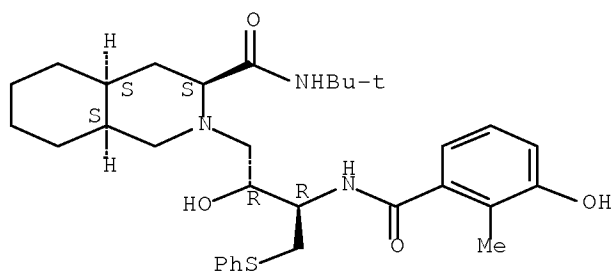
LA English

AB Objective: to compare changes in quality of life (QoL) over 96 wk in patients  
enrolled in a triple-therapy protocol, a treatment- intensification protocol,  
or an induction-maintenance therapy protocol, and to compare QoL between  
patients who continued and discontinued their antiretroviral regimen.  
Patients: naive patients enrolled in a triple-therapy protocol  
(zidovudine/lamivudine or stavudine/didanosine or stavudine/lamivudine  
supplemented with protease inhibitor therapy of choice) (n ≈ 35), a protocol  
of treatment intensification (ritonavir/saquinavir or  
ritonavir/saquinavir/stavudine) (n = 74) in which therapy was intensified with  
nucleoside analog(s) in cases of insufficient viral suppression, and a  
protocol of induction (saquinavir/nelfinavir/lamivudine/ stavudine)  
maintenance (saquinavir/nelfinavir or stavudine/nelfinavir) therapy (n = 50).  
Main outcome measure: changes from baseline in QoL assessed by the Medical  
Outcomes Study HIV Health Survey at weeks 0, 12, 24, 36, 48, 72 and 96.  
Results: patients in the triple-therapy and treatment-intensification  
protocols showed more favorable changes in phys. function, social function,  
mental health, energy/fatigue, health distress and overall QoL compared to  
patients in the induction-maintenance protocol, with patients in the first two  
protocols showing improvements in QoL and those in the induction-maintenance

protocol showing declining or unchanged QoL. Patients who discontinued study medication due to insufficient efficacy, toxicities or at their own request showed less favorable changes in QoL compared with patients who continued their regimen. The highest proportion of discontinuations was within the induction-maintenance protocol. Conclusion: antiretroviral treatment strategies that are effective and tolerable have the potential to improve patients' QoL over 96 wk.

IT 159989-64-7, Nelfinavir  
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (three antiretroviral treatment strategies for HIV-1 infection)  
 RN 159989-64-7 CAPLUS  
 CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 509 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2001:834646 CAPLUS Full-text  
 DN 137:57002  
 TI HIV-protease inhibitors alter retinoic acid synthesis  
 AU Toma, Emil; Devost, Dominic; Lan, Nathaly Chow; Bhat, Pangala V.  
 CS Department of Microbiology & Infectious Diseases, Centre hospitalier de l'Universite de Montreal, Montreal, QC, H2W 1T8, Can.  
 SO AIDS (London, United Kingdom) (2001), 15(15), 1979-1984  
 CODEN: AIDSET; ISSN: 0269-9370  
 PB Lippincott Williams & Wilkins  
 DT Journal  
 LA English  
 AB An increasing rate of highly-active antiretroviral therapy (HAART)-associated metabolic and morphol. abnormalities has been reported in HIV-infected persons. Some of them resemble retinoid-related adverse events, indicating alteration(s) of retinol metabolism or of retinoic acid-mediated signaling. Retinol levels in patients with or without HAART were evaluated and the effect of antiretroviral agents on retinal dehydrogenase (RALDH), a key enzyme involved in retinoic acid synthesis, was assessed. Plasma retinol levels, measured in six patients receiving HAART and in five others with no antiretroviral therapy, were correlated with levels of serum retinol-binding proteins. We then studied the effects of seven antiretroviral agents on RALDH activity and gene expression in a kidney-derived cell line (LLCPK). Plasma retinol levels in patients receiving HAART were decreased in comparison with those not receiving antiretroviral drugs ( $51 \pm 5$  vs.  $66 \pm 11$   $\mu\text{g/dL}$ ;  $P = 0.03$ ), whereas retinol-binding protein levels were increased ( $68 \pm 18$  vs.  $45 \pm 10$

mg/L;  $P = 0.04$ ). RALDH activity was heightened by ritonavir (24%), indinavir (17%), saquinavir (17%), zalcitabine (14%), delavirdine (12%) and nelfinavir (10%) and decreased (22%) by DMP-450. RALDH gene expression was induced only by indinavir. These data indicate that certain retinoid-like adverse effects in HAART-receiving patients are not due to higher retinol levels. Enhanced RALDH activity or/and gene expression by some protease inhibitors could increase retinoic acid concns. Elevated retinoic acid levels might be responsible for retinoid-like or other adverse effects due to alterations in the expression of retinoic acid-responsive genes.

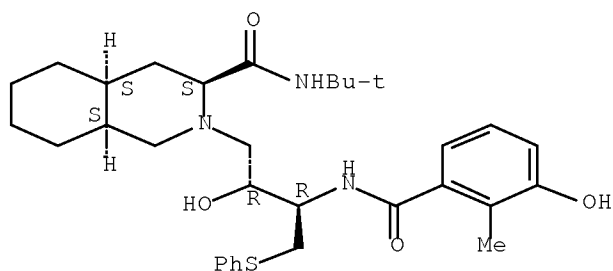
IT 159989-64-7, Nelfinavir

RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(HIV-proteinase inhibitors alter retinoic acid synthesis)

RN 159989-64-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 510 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:834645 CAPLUS Full-text

DN 136:144707

TI Randomized, double-blind comparison of two nelfinavir doses plus nucleosides in HIV-infected patients (Agouron study 511)

AU Saag, Michael S.; Tebas, Pablo; Sension, Michael; Conant, Marcus; Myers, Robert; Chapman, Sharon K.; Anderson, Robert; Clendeninn, Neil

CS Viracept Collaborative Study Group, University of Alabama at Birmingham, Birmingham, AL, 35294-2050, USA

SO AIDS (London, United Kingdom) (2001), 15(15), 1971-1978

CODEN: AIDSET; ISSN: 0269-9370

PB Lippincott Williams & Wilkins

DT Journal

LA English

AB Objective: to evaluate the safety and antiretroviral activity of nelfinavir mesylate at two doses as part of a combination regimen in HIV-infected, antiretroviral-naive patients. Design: phase III, multicenter, double-blind, placebo-controlled trial. Patients and methods: two-hundred and ninety-seven patients were randomized to one of three treatment groups: nelfinavir 750 mg three times daily (tid), nelfinavir 500 mg tid, or matching placebo, each in combination with open-label zidovudine (ZDV) 200 mg tid and lamivudine (3TC) 150 mg twice daily (bid). Data were analyzed on an intent-to-treat basis. Results: sixty-seven percent of patients receiving nelfinavir 750 mg tid, and 50% receiving nelfinavir 500 mg tid in combination with ZDV/3TC achieved HIV

RNA < 400 copies/mL compared to 7% receiving ZDV/3TC plus placebo (P < 0.001); 55% and 30% of patients in the nelfinavir-containing arms achieved HIV RNA < 50 copies/mL at week 24. This compared with 4% in the placebo-containing arm. For patients continuing nelfinavir treatment (750 mg or 500 mg tid as treated) for a further 6 mo, the proportions achieving < 400 copies/mL at week 48 were 75% and 54% (P = 0.001) and < 50 copies/mL 61% and 37%, resp. (P = 0.004). The mean increases from baseline in CD4 cell counts were also durable in patients receiving the triple combination nelfinavir therapy. The range and incidence of adverse events was similar for the two nelfinavir-containing arms, with diarrhea being the most common adverse event. Conclusions: nelfinavir plus ZDV/3TC was superior to ZDV/3TC/placebo. In addition, the 750 mg tid nelfinavir dose was better than the 500 mg tid dose. Virol. responses were sustained over 12 mo.

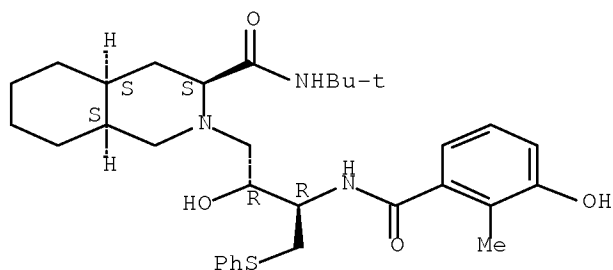
IT 159989-64-7, Nelfinavir

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (nelfinavir dosage plus nucleosides in HIV-infected humans)

RN 159989-64-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 511 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:834644 CAPLUS [Full-text](#)

DN 136:144706

TI Persistence of HIV-1 resistance in lymph node mononuclear cell RNA despite effective HAART

AU Lafeuillade, Alain; Khiri, Hacene; Chadapaud, Stephane; Hittinger, Gilles; Halfon, Philippe

CS Department of Infectious Diseases, General Hospital, Toulon, Fr.

SO AIDS (London, United Kingdom) (2001), 15(15), 1965-1969

CODEN: AIDSET; ISSN: 0269-9370

PB Lippincott Williams & Wilkins

DT Journal

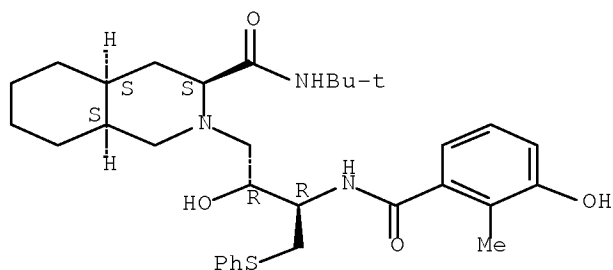
LA English

AB Objective: To analyze the presence of genotypic and phenotypic resistance in lymph node mononuclear cells from patients with sustained undetectable plasma HIV-1 RNA with highly active antiretroviral therapy. Design: Cross-sectional study on 27 HIV-infected patients receiving triple therapy for a mean period of  $232.8 \pm 22.1$  wk. Methods: HIV-1 RNA was measured in plasma and lymph node cells using PCR. Reverse transcriptase and protease genes were sequenced from HIV-1 RNA obtained from lymph node cells and from peripheral blood mononuclear

cell proviral DNA using a com. available kit (TruGene). Phenotypic resistance was assessed by using a recombinant virus assay (AntiVirogram). Results: Mutations were not found in lymph node mononuclear cell RNA in six out of nine patients on first-line regimens although they were detected in 15 out of 18 who received prior suboptimal combinations. Phenotypic resistance was confirmed in most of these cases. These patterns of resistance were closely related to patients' history of antiretroviral therapy and genotypic anal. of plasma HIV-1 RNA taken just before initiation of the current regimen. In half the patients analyzed, resistance mutations found in lymph nodes were not always detected in archival proviral DNA from blood cells. Mean levels of HIV-1 RNA in lymph node cells were not different in patients exhibiting resistance compared with those harboring wild-type viruses. Conclusion: These data demonstrate that resistant HIV-1 is produced in lymphoid tissues for prolonged periods despite effective therapy. The mechanism could represent a release from previously infected cells rather than new cycles of cellular infection.

IT 159989-64-7, Nelfinavir  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (HIV-1 resistance in lymph node mononuclear cell RNA despite effective HAART in humans)  
 RN 159989-64-7 CAPLUS  
 CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 512 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:833855 CAPLUS Full-text

DN 135:352760

TI Inhibition of taxane metabolism

IN Synold, Timothy W.; Doroshov, James H.

PA USA

SO U.S. Pat. Appl. Publ., 8 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20010041706	A1	20011115	US 2001-814072	20010322 <--
PRAI	US 2000-191828P	P	20000324		

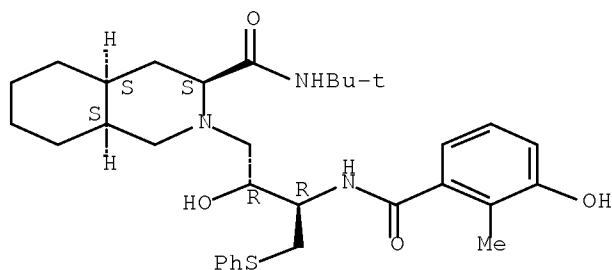
AB Methods are disclosed for the inhibition of taxane metabolism in patients receiving anticancer taxane treatment, in which an effective amount of a CYP3A4 inhibitor and a CYP2C8 inhibitor are administered to the patient.

IT 159989-64-7, Nelfinavir  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (inhibition of taxane metabolism)

RN 159989-64-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



L11 ANSWER 513 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:831902 CAPLUS Full-text

DN 136:247758

TI Synthesis and anti-HIV activity of glucose-containing prodrugs derived from saquinavir, indinavir and nelfinavir

AU Rouquayrol, Marielle; Gaucher, Berangere; Greiner, Jacques; Aubertin, Anne-Marie; Vierling, Pierre; Guedj, Roger

CS Parc Valrose, Laboratoire de Chimie Bio-Organique, Universite de Nice Sophia-Antipolis, UMR 6001 CNRS, Nice, F-06108, Fr.

SO Carbohydrate Research (2001), 336(3), 161-180  
 CODEN: CRBRAT; ISSN: 0008-6215

PB Elsevier Science Ltd.

DT Journal

LA English

OS CASREACT 136:247758

AB With the aim at improving the transport of the current HIV protease inhibitors across the intestinal and blood brain barriers and their penetration into the central nervous system, the synthesis of various acyl and carbamoyl glucose-containing prodrugs derived from saquinavir, indinavir and nelfinavir, their in vitro stability with respect to hydrolysis, and their anti-HIV activity have been investigated. D-Glucose, which is actively transported across these barriers, was connected through its 3-hydroxyl to these anti-proteases via a linker. The liberation of the active free drug during the incubation time of the prodrugs with the cells was found to be crucial for HIV inhibition. The labile ester linking of the glucose-containing moiety to the peptidomimetic hydroxyl of saquinavir or to the indinavir C-8 hydroxyl, which is not part of the transition state isostere, is not an obstacle for anti-HIV activity. This is not the case for its stable carbamate linking to the peptidomimetic hydroxyl of saquinavir, indinavir and nelfinavir. The chemical stability with respect to hydrolysis of some of the saquinavir and indinavir prodrugs reported here, the liberation rate of the active free drug and the HIV

inhibitory potency are acceptable for an in vivo use of these prodrugs. These glucose-linked ester and carbamate prodrugs display a promising therapeutic potential provided that their bioavailability, penetration into the HIV sanctuaries, and/or the liberation of the active free drug from the carbamate prodrugs are improved. Furthermore, no cytotoxicity was detected for the prodrugs for concns. as high as 10 or even 100  $\mu$ M, thus indicating an encouraging therapeutic index.

IT 159989-64-7, Nelfinavir

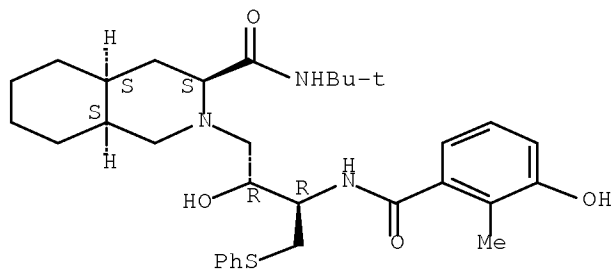
RL: PAC (Pharmacological activity); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent)

(synthesis and anti-HIV activity of glucose-containing prodrugs derived from saquinavir, indinavir, and nelfinavir)

RN 159989-64-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 514 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:824699 CAPLUS Full-text

DN 136:128646

TI Impact of HIV type 1 drug resistance mutations and phenotypic resistance profile on virologic response to salvage therapy

AU Ross, Lisa; Liao, Qiming; Gao, Haitao; Pham, Sissi; Tolson, Jerry; Hertogs, Kurt; Larder, Brendan; Saag, Michael S.

CS GlaxoSmithKline, Research Triangle Park, NC, 27709, USA

SO AIDS Research and Human Retroviruses (2001), 17(15), 1379-1385

CODEN: ARHRE7; ISSN: 0889-2229

PB Mary Ann Liebert, Inc.

DT Journal

LA English

AB This study examines the association between presence of drug resistance mutations and phenotypic resistance at baseline to virol. response to salvage therapy in a community setting. The study population consisted of 58 antiretroviral drug-experienced patients with HIV-1 infection who had recently switched therapy because of virol. failure. Drug resistance mutations in the reverse transcriptase- and protease-coding regions and phenotypic susceptibility to 13 antiretroviral drugs were assessed at baseline. Plasma HIV-1 RNA levels were assessed at baseline and at subsequent clinic visits. Results showed that three variables were significant in predicting virol. response: HIV-1 levels at baseline, number of protease mutations, and phenotypic sensitivity score for the regimen at baseline. For four drugs there was a significant association between the presence of specific drug

resistance mutations and >10-fold phenotypic resistance to that drug. With phenotypic resistance defined as >4-fold resistance, the association between specific drug resistance mutations and phenotypic resistance was significant for seven drugs. Overall, these data show that phenotypic susceptibility and absence of drug resistance mutations, particularly protease mutations, are significant predictors of virol. response. For several drugs, specific combinations of drug resistance mutations are associated with decreased phenotypic susceptibility and might provide useful clin. guidelines in selecting therapeutic options.

IT 159989-64-7, Nelfinavir

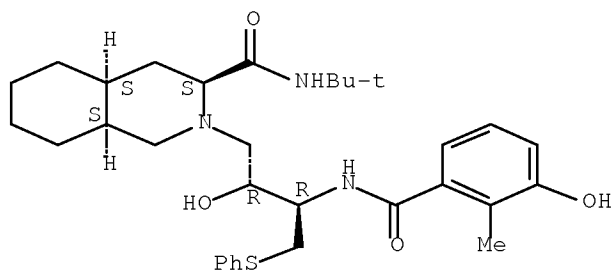
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(HIV type 1 drug resistance mutations and phenotypic resistance profile on virol. response to salvage therapy)

RN 159989-64-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 515 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:816455 CAPLUS Full-text

DN 135:348871

TI Antiviral compositions containing phorbol derivatives as the main active ingredient

IN Hattori, Masao; Yamamoto, Naoki; Mori, Masao

PA Lead Chemical Co., Ltd, Japan

SO PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

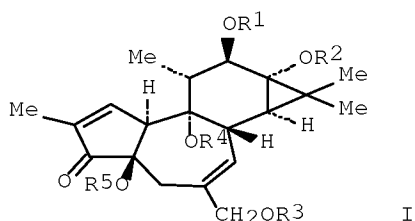
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001082927	A1	20011108	WO 2000-JP2913	20000502 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,				



10/564,557

CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 PRAI WO 2000-JP2913 20000502  
 OS MARPAT 135:348871  
 GI



AB Described are antiviral compns. containing as the active ingredients: (i) phorbol derivs. which are represented by the general formula (I; wherein R1, R2, R3, R4 and R5 independently represent each hydrogen, an aliphatic carboxylate or an aromatic carboxylate.), have a ratio  $r = CC0/IC100$  of 2 or more (wherein IC100 represents the concentration at which the cell pathogenic effect (CPE) of HIV-1 in MT-4 cells is inhibited at a ratio of 100; and CC0 represents the concentration at which the survival of MT-4 cells is reduced in a cell proliferation test), and show activation of protein kinase C (PKC) at a concentration of 10 ng/mL by 30% or less; and (ii) a chemical capable of suppressing or inhibiting the replication process or the maturation process of viruses. These compns. are efficacious particularly against human immunodeficiency virus (HIV). Thus, Croton tiglium seeds (3 kg) was refluxed with MeOH (10 L + 3) and the combined methanol solution was concentrated under reduced pressure to give an oil (763 g) which was suspended in 90% aqueous MeOH (7 L) and extracted with hexane (4 L + 3) and then with ether (4 L + 3). The combined ether extract was concentrated to give a resin-like substance (150 g) which was subjected to silica gel chromatog. and medium pressure liquid chromatog. to give 13-O-tigloylphorbol-20-(9Z,12Z-octadecadienoate) 60, 13-O-acetylphorbol-20-(9Z,12Z-octadecadienoate) 153, 12-O-dodecanoylphorbol-13-(2-methylbutyrate) 21, 12-O-(2-methylbutyryl)phorbol-13-dodecanoate 30, 12-O-acetylphorbol-13-tiglate 35, 12-O-acetylphorbol-13-decanoate 74, 12-O-decanoylphorbol-13-(2-methylbutyrate) 57, 12-O-tigloylphorbol-13-(2-methylbutyrate) 12, and 12-O-tetradecanoylphorbol-13-acetate 110 mg. Derivatization of these compds. by saponification, selective hydrolysis, esterification with acetic anhydride, benzoyl chloride, or butyryl chloride, reduction, or methylation, etc. gave phorbol, isophorbol, 4-deoxy-4 $\alpha$ -phorbol, 13-O-acetylphorbol, phorbol-12,13-diacetate, 13-O-acetylcrotophorbolone-enol-20-linoleate, 12-O-tetradecanoylphorbol-13,20-diacetate, 4 $\alpha$ -phorbol-12,13,20-triacetate, 4 $\alpha$ -phorbol-4,12,13,20-tetraacetate, phorbol-12,13,20-triacetate, lumiphorbol-12,13,20-triacetate, 3-deoxo-3 $\beta$ -hydroxyphorbol-12,13,20-triacetate, 4-O-methylphorbol-12,13,20-triacetate, phorbol-4,9,12,13,20-pentaacetate, phorbol-12,13,20-tribenzoate, and 4 $\alpha$ -phorbol-12,13,20-tributyrate. In assays for testing anti-HIV activity and PKC activation activity, 12-O-acetylphorbol-13-decanoate showed IC100 and CC0 (defined as above) of 0.0076 and 62.5, resp., with  $r$  ratio of 8,220 and exhibited 0 and 17% PKC activation at 10 ng/mL and 17  $\mu$ g/mL, resp.

IT 159989-64-7, Nelfinavir

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(inhibitor of protease-mediated synthesis of HIV core protein,

antiviral composition containing; antiviral compns. against HIV-1

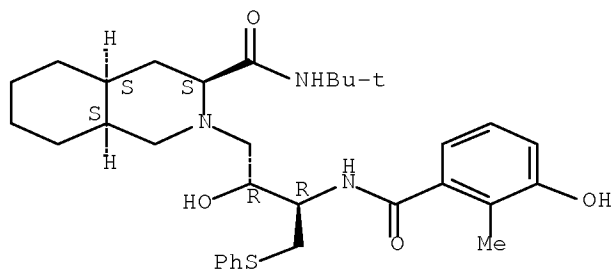
containing phorbol

derivs. of Croton tiglim and their derivs. as active ingredients)

RN 159989-64-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 516 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:816447 CAPLUS Full-text

DN 135:352830

TI Methods of, and HIV protease inhibitor compounds for, inhibiting calpains, and therapeutic use thereof

IN De Petrillo, Paolo B.; Wan, Wenshuai

PA United States Dept. of Health and Human Services, USA

SO PCT Int. Appl., 66 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001082919	A2	20011108	WO 2001-US40652	20010502 <--
	WO 2001082919	A3	20020510		
	WO 2001082919	B1	20020725		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	AU 2001059817	A5	20011112	AU 2001-59817	20010502 <--
	US 20020115665	A1	20020822	US 2001-847872	20010502 <--
	US 6448245	B2	20020910		
PRAI	US 2000-202378P	P	20000504		
	WO 2001-US40652	W	20010502		
OS	MARPAT 135:352830				
AB	A method is disclosed for inhibiting calpain by contacting calpain with one or more HIV protease inhibitors or analogs. Included are embodiments for identifying subjects at risk of suffering calpain-mediated physiolo. damage and administering to them the HIV protease inhibitors or analogs. Alternatively, a				

compound may be administered to a subject following an actual event implicating activation of calpain. Also included are methods of treating or preventing calpain-mediated physiolo. damage in a subject by administering to the subject a therapeutically effective amount of a pharmaceutical composition which includes at least one HIV protease inhibitor or analog. The pharmaceutical compns. can be used in the treatment of a variety of conditions or diseases implicated by or associated with calpain activation, including cardiovascular diseases.

IT 159989-64-7, Nelfinavir

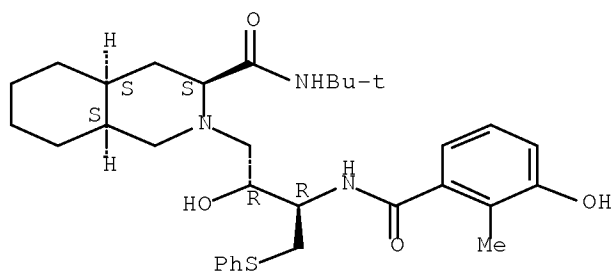
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(HIV protease inhibitors for calpain inhibition, and therapeutic use)

RN 159989-64-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



L11 ANSWER 517 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:812202 CAPLUS Full-text

DN 136:95645

TI Impaired response to HAART in HIV-infected individuals with high autonomic nervous system activity

AU Cole, Steve W.; Naliboff, Bruce D.; Kemeny, Margaret E.; Griswold, Marshall P.; Fahey, John L.; Zack, Jerome A.

CS Department of Medicine, University of California, Los Angeles, CA, 90095, USA

SO Proceedings of the National Academy of Sciences of the United States of America (2001), 98(22), 12695-12700

CODEN: PNASA6; ISSN: 0027-8424

PB National Academy of Sciences

DT Journal

LA English

AB Neurotransmitters can accelerate HIV-1 replication in vitro, leading us to examine whether differences in autonomic nervous system (ANS) activity might promote residual HIV-1 replication in patients treated with highly active antiretroviral therapy. Patients who showed constitutively high levels of ANS activity before highly active antiretroviral therapy experienced poorer suppression of plasma viral load and poorer CD4+ T cell recovery over 3-11 mo of therapy. ANS activity was not related to demog. or behavioral characteristics that might influence pathogenesis. However, the ANS neurotransmitter norepinephrine enhanced replication of both CCR5- and CXCR4-tropic strains of HIV-1 in vitro via chemokine receptor up-regulation and

enhanced viral gene expression, suggesting that neural activity may directly promote residual viral replication.

IT 159989-64-7, Nelfinavir

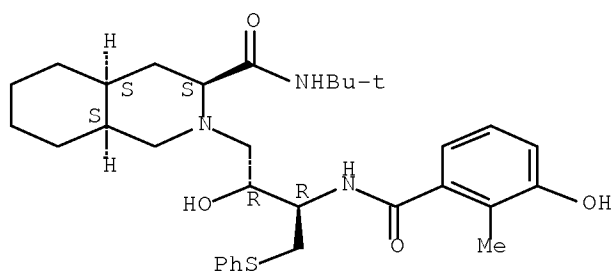
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(impaired response to HAART in HIV-infected humans with high autonomic nervous system activity)

RN 159989-64-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 518 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:811051 CAPLUS [Full-text](#)

DN 136:95644

TI Virologic and immunologic parameters that predict clinical response of AIDS-associated Kaposi's sarcoma to highly active antiretroviral therapy

AU Pellet, C.; Chevret, S.; Blum, L.; Gauville, C.; Hurault, M.; Blanchard, G.; Agbalika, F.; Lascoux, C.; Ponscarne, D.; Morel, P.; Calvo, F.; Lebbe, C.

CS Laboratory of Pharmacology, Hopital Saint-Louis, Paris, 75010, Fr.

SO Journal of Investigative Dermatology (2001), 117(4), 858-863

CODEN: JIDEAE; ISSN: 0022-202X

PB Blackwell Science, Inc.

DT Journal

LA English

AB The purpose of the work was to assess the predictive value of biol. factors on the efficacy of highly active antiretroviral therapy alone or combined with chemotherapy on AIDS-associated Kaposi's sarcoma. Twenty-six AIDS-Kaposi's sarcoma patients who started therapy with protease inhibitors were investigated. No baseline chemotherapy was associated with less severe initial clin. status. Median follow-up was 652 d. The main outcome measures were as follows: best Kaposi's sarcoma clin. response; Kaposi's-sarcoma-associated herpesviral load in peripheral blood mononuclear cells using real-time quant. polymerase chain reaction (non-detectable of less than 100 copies per µg); human immunodeficiency viral charge in plasma (non-detectable if less than 200 copies per mL); and CD4 lymphocyte count. Time to undetectable Kaposi's-sarcoma-associated herpesviral load, time to undetectable human immunodeficiency viral charge, and time to CD4 ≥ 150 per µl were also recorded over time, from 2 mo measurements. Patients were staged according to the AIDS Clin. Trials Group-based tumor, immune, systemic staging system criteria. At baseline, Kaposi's sarcoma was progressive for 25 (96%) of the 26 enrolled

patients. Complete or partial response to highly active antiretroviral therapy alone or combined with chemotherapy was achieved in 22 patients (85%). Median time to clin. response was estimated at 251 d. Clin. response was faster in patients without chemotherapy at baseline ( $p = 0.003$ ) as well as in patients not previously treated with reverse transcriptase inhibitors ( $p = 0.0012$ ). Using univariable analyses, predictive factors of clin. response were undetectable Kaposi's-sarcoma-associated herpesviremia ( $p = 0.013$ ), undetectable human immunodeficiency viremia ( $p = 0.03$ ), and relative variation of CD4 lymphocytes ( $p = 0.004$ ). Using multivariable anal., undetectable Kaposi's-sarcoma-associated herpesviremia ( $p = 0.009$ ) and relative variation of CD4 ( $p = 0.005$ ) were independently selected as having a predictive value for clin. response. Occurrence of nondetection of either Kaposi's-sarcoma-associated herpesvirus or human immunodeficiency virus was not associated with baseline CD4 value. Kaposi's-sarcoma-associated herpesvirus quant. viral charge is an independent predictive factor of the efficacy of highly active antiretroviral therapy on AIDS-Kaposi's sarcoma. Our results support immune reconstitution as a mechanism of response of Kaposi's sarcoma to highly active antiretroviral therapy.

IT 159989-64-7, Nelfinavir

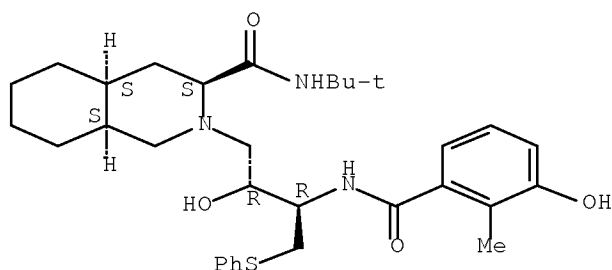
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(predictive value of biol. factors on efficacy of highly active antiretroviral therapy alone or combined with chemotherapy on AIDS-associated Kaposi's sarcoma.)

RN 159989-64-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 519 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:811022 CAPLUS Full-text

DN 136:112259

TI Effect of highly active antiretroviral therapy on fat, lean, and bone mass in HIV-seropositive men and women

AU McDermott, Ann Yelmokas; Shevitz, Abby; Knox, Tamsin; Roubenoff, Ronenn; Kehayias, Joseph; Gorbach, Sherwood

CS Department of Family Medicine and Community Health, Boston, MA, USA

SO American Journal of Clinical Nutrition (2001), 74(5), 679-686

CODEN: AJCNAC; ISSN: 0002-9165

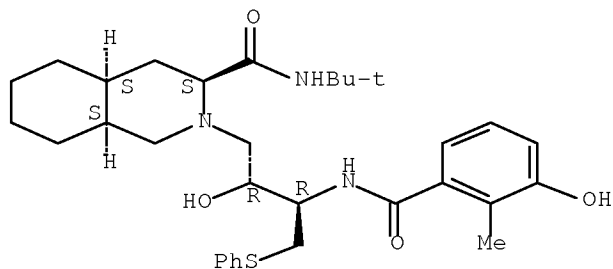
PB American Society for Clinical Nutrition

DT Journal

LA English

- AB Alterations in body composition have been reported in HIV-pos. adults receiving highly active antiretroviral therapy (HAART), but the magnitude and potential determinants of these changes are unclear. We compared total and regional body composition, as measured by dual-energy x-ray absorptiometry, in 203 HIV-pos. men and 62 HIV-pos. women according to HAART. This was a cross-sectional anal. of a cohort study of nutrition and HIV infection. After adjustment for age, weight, race, and exercise habits, total weight and fat mass did not differ significantly in men or women by HAART. Trunk fat was greater in men (1.0 kg;  $P < 0.001$ ) and women (1.4 kg;  $P = 0.005$ ) and leg fat was lower in men (-1.0 kg;  $P < 0.001$ ) and women (-1.5 kg,  $P = 0.005$ ) receiving HAART than in those not. This corresponded to a greater percentage of total fat mass located in the trunk (men: 7.5%,  $P < 0.001$ ; women: 5.1%,  $P = 0.02$ ). Lean mass was also greater with longer duration of HAART in men ( $P < 0.002$ ). In men receiving HAART, total and regional bone mineral content were less than in the men not receiving HAART ( $P < 0.001$ ). These effects increased with longer duration of HAART. Protease inhibitors were associated with the largest differences in regional fat. HAART is associated with redistribution of fat mass from the legs to the trunk, despite no significant differences in total fat mass or weight. In men, HAART is also associated with a reduction in bone mineral content, suggesting that HAART increases the risk of central obesity and osteoporosis.
- IT 159989-64-7, Nelfinavir  
 RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (highly active antiretroviral therapy effect on fat, lean, and bone mass in HIV-seropos. men and women)
- RN 159989-64-7 CAPLUS
- CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.

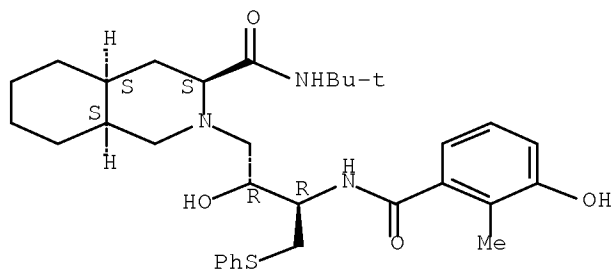


RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L11 ANSWER 520 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN
- AN 2001:810625 CAPLUS Full-text
- DN 137:56997
- TI Hepatotoxicity with antiretroviral treatment of pregnant women
- AU Hill, James B.; Sheffield, Jeanne S.; Zeeman, Gerda G.; Wendel, George D.
- CS Department of Obstetrics and Gynecology, University of Texas Southwestern Medical Center, Dallas, TX, USA
- SO Obstetrics & Gynecology (New York, NY, United States) (2001), 98(5, Pt. 2), 909-911  
 CODEN: OBGNAS; ISSN: 0029-7844
- PB Elsevier Science Inc.

DT Journal  
 LA English  
 AB BACKGROUND:Hepatotoxicity in adults with human immunodeficiency virus (HIV) infection has been associated with all classes of antiretroviral drugs and coinfection with hepatitis B and C virus. We treated two HIV-infected pregnant women in whom hepatotoxicity developed after initiating antiretroviral therapy. CASES:The first woman developed icterus, jaundice, hyperbilirubinemia, and elevated serum aminotransferase levels approx. 5 mo after beginning combination antiretroviral therapy with zidovudine, lamivudine, and efavirenz. Serum aminotransferase abnormalities improved after discontinuation of antiretroviral medications. The second woman had similar symptoms and laboratory abnormalities 3 mo after initiation of zidovudine, lamivudine, and nelfinavir. Despite initial improvement after discontinuing her antiretroviral medications, fulminant hepatic failure developed and she died. Both patients tested neg. for hepatitis A, B, and C; Epstein-Barr virus; and cytomegalovirus. There was no history of illicit drug use, alc. use, or blood transfusions in either case. CONCLUSION:We emphasize the need for careful monitoring for hepatotoxicity after initiation of antiretroviral therapy.  
 IT 159989-64-7, Nelfinavir  
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antiviral drugs hepatotoxicity in HIV-infected pregnant women)  
 RN 159989-64-7 CAPLUS  
 CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.

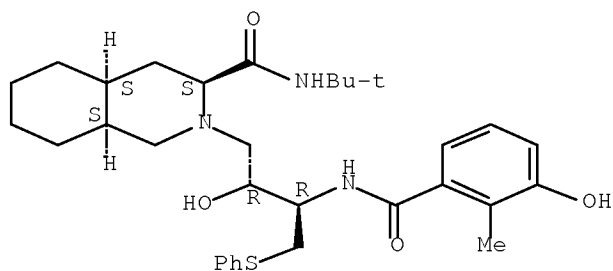


RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 521 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2001:801259 CAPLUS Full-text  
 DN 136:95639  
 TI Antiretroviral prophylaxis for community exposure to the human immunodeficiency virus in Switzerland, 1997-2000  
 AU Bernasconi, Enos; Jost, Joseph; Ledergerber, Bruno; Hirschel, Bernard; Francioli, Patrick; Sudre, Philippe  
 CS Infectious Diseases Unit, Department of Medicine, Regional Hospital, Lugano, Switz.  
 SO Swiss Medical Weekly (2001), 131(29/30), 433-437  
 CODEN: SMWWAI; ISSN: 1424-7860  
 PB EMH Swiss Medical Publishers Ltd.  
 DT Journal  
 LA English

- AB To analyze the data from Swiss nationwide voluntary reporting on non-occupational HIV-postexposure prophylaxis (HIV-PEP) by prescribing physicians. One hundred and seventy-six persons, who received antiretroviral prophylaxis for community exposure to HIV between Dec. 1997 and Mar. 2000, were included in this prospective cohort study with standardized data collection. Information on the source, the exposed person, type of exposure, treatment, and outcome was reported by physicians on a voluntary basis to three co-ordinating centers. HIV-PEP was prescribed predominantly following sexual exposure (69%). Needle injury was the second most common type of exposure (19% of all exposures), mostly occurring in a non-health care related "professional" setting (ie, housekeepers, concierges [caretakers], and policemen). Needle sharing accounted for only 4% of all cases of exposure. The HIV status of the source often remained unknown (56%). Most patients received a combination of three antiretroviral drugs (zidovudine/lamivudine/nelfinavir in 34.1%; zidovudine/lamivudine/indinavir in 22.8%; zidovudine/lamivudine/nevirapine in 18.6%; various triple combinations in 13.8%). Follow-up information was available for 86 patients. In this group 78 (91%) completed at least one week of prophylaxis. Side-effects were common (70.9%), particularly diarrhea (29.6%) and nausea (20.9%). Two patients experienced severe side effects, nephrolithiasis with sepsis, and toxic hepatitis, resp. In most of the cases where HIV-PEP was prescribed the indication was questionable, with the HIV status of the source unknown. The role of HIV-PEP as part of HIV prevention programs should be well defined in view of the cost and potential for causing severe side-effects.
- IT 159989-64-7, Nelfinavir  
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antiretroviral prophylaxis for community exposure to the human immunodeficiency virus in Switzerland)
- RN 159989-64-7 CAPLUS
- CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L11 ANSWER 522 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN
- AN 2001:799024 CAPLUS Full-text
- DN 136:95633
- TI DPC 681 and DPC 684: potent, selective inhibitors of human immunodeficiency virus protease active against clinically relevant mutant variants
- AU Kaltenbach, Robert F., III; Trainor, George; Getman, Daniel; Harris, Greg; Garber, Sena; Cordova, Beverly; Bacheler, Lee; Jeffrey, Susan; Logue,



Kelly; Cawood, Pamela; Klabe, Ronald; Diamond, Sharon; Davies, Marc; Saye, Joanne; Jona, Janan; Erickson-Viitanen, Susan

CS Departments of Chemistry and Physical Sciences, Virology, Drug Metabolism, Pharmacy and Safety Assessment, DuPont Pharmaceuticals Co., Wilmington, DE, 19880, USA

SO Antimicrobial Agents and Chemotherapy (2001), 45(11), 3021-3028  
CODEN: AMACCQ; ISSN: 0066-4804

PB American Society for Microbiology

DT Journal

LA English

AB Human immunodeficiency virus (HIV) protease inhibitors (PIs) are important components of many highly active antiretroviral therapy regimens. However, development of phenotypic and/or genotypic resistance can occur, including cross-resistance to other PIs. Development of resistance takes place because trough levels of free drug are inadequate to suppress preexisting resistant mutant variants and/or to inhibit de novo-generated resistant mutant variants. There is thus a need for new PIs, which are more potent against mutant variants of HIV and show higher levels of free drug at the trough. We have optimized a series of substituted sulfonamides and evaluated the inhibitors against laboratory strains and clin. isolates of HIV type 1 (HIV-1), including viruses with mutations in the protease gene. In addition, serum protein binding was determined to estimate total drug requirements for 90% suppression of virus replication (plasma IC90). Two compds. resulting from our studies, designated DPC 681 and DPC 684, are potent and selective inhibitors of HIV protease with IC90s for wild-type HIV-1 of 4 to 40 nM. DPC 681 and DPC 684 showed no loss in potency toward recombinant mutant HIVs with the D30N mutation and a fivefold or smaller loss in potency toward mutant variants with three to five amino acid substitutions. A panel of chimeric viruses constructed from clin. samples from patients who failed PI-containing regimens and containing 5 to 11 mutations, including positions 10, 32, 46, 47, 50, 54, 63, 71, 82, 84, and 90 had mean IC50 values of <20 nM for DPC 681 and DPC 681, resp. In contrast, marketed PIs had mean IC50 values ranging from 200 nM (amprenavir) to >900 nM (nelfinavir).

IT 159989-64-7, (Nelfinavir).

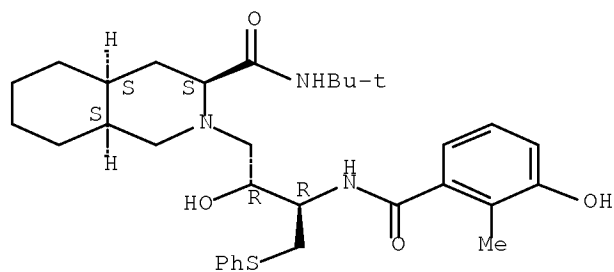
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(activity of HIV-protease inhibitors DPC 681 and DPC 684 against clin. relevant mutant variants)

RN 159989-64-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 523 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:790092 CAPLUS Full-text

DN 136:144693

TI Early detection of mixed mutations selected by antiretroviral agents in HIV-infected primary human lymphocytes

AU Schinazi, Raymond F.; Schlueter-Wirtz, Susan; Stuyver, Lieven

CS Department of Veterans Affairs, Decatur, GA, USA

SO Antiviral Chemistry & Chemotherapy (2001), 12(Suppl. 1), 61-65

CODEN: ACCHEH; ISSN: 0956-3202

PB International Medical Press

DT Journal

LA English

AB A growing concern in the pursuit of new therapies for HIV-1 infection is the potential for the virus to develop drug resistance. With the advent of modern antiretroviral therapy and the common use of combined modalities, it is difficult to identify in the clinic the mutations associated with a specific drug. In general, drug selection of mutants using a relevant cell system, such as primary human lymphocytes, is a good prognosticator of what will happen in humans. In this study, HIV-infected human peripheral blood mononuclear cells were exposed, at a concentration of 1- to 10-fold the median effective antiviral concentration, to the nucleosides (-)- $\beta$ -2',3'-dideoxy-3'-thia-5-fluorocytidine [(-)-FTC], (-)- $\beta$ -2',3'-dideoxy-3'-thiacytidine (3TC), 3'-azido-2',3'-dideoxyuridine (CS-87, AZDU), 3'-azido-2',3'-dideoxy-5-methylcytidine (CS-92, AZMC), 2',3'-didehydro-3'-deoxythymidine (d4T),  $\beta$ -L-2',3'-didehydro-2',3'-dideoxy-5-fluorocytidine ( $\beta$ -L-D4FC),  $\beta$ -L-2',3'-dideoxyadenine SATE [ $\beta$ -L-ddAMP-bis(tbuty(SATE))],  $\beta$ -L-5-fluoro-2',3'-dideoxycytidine (L-FddC), and the protease inhibitors nelfinavir and amprenavir (VX-478). Virus from the culture supernatant was amplified by PCR and analyzed by both HIV-1 reverse transcriptase and protease line probe assay. All the L-nucleoside analogs tested selected for the V184 mutation, including the L-pyrimidine nucleosides 3TC (-)-FTC,  $\beta$ -L-FddC,  $\beta$ -L-D4FC and the  $\beta$ -L-purine nucleoside.  $\beta$ -L-D4FC also selected for K/R65 in addition to V184, indicating that these two mutations are linked and compatible in vitro. No pattern of mutations leading to resistance or reduced susceptibility was discerned with d4T. Rapid genotyping anal. revealed the different kinetics and mutations obtained by in vitro selection in HIV-infected cells exposed to nucleoside analogs and protease inhibitors.

IT 159989-64-7, Nelfinavir

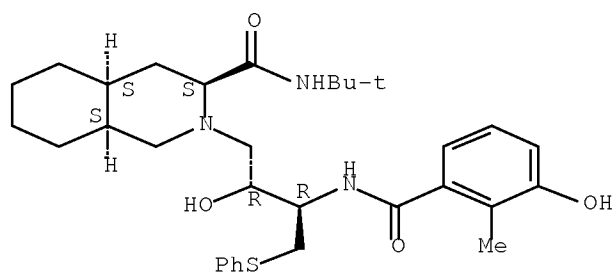
RL: PAC (Pharmacological activity); BIOL (Biological study)

(early detection of mixed mutations selected by antiretroviral agents in HIV-infected primary human lymphocytes)

RN 159989-64-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-, (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.

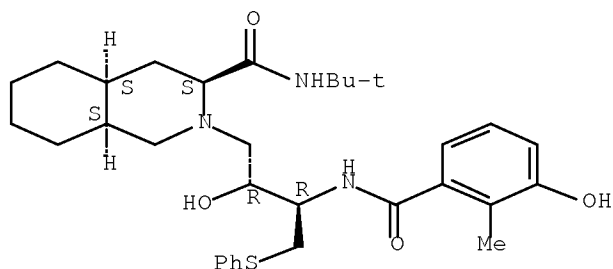


RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L11 ANSWER 524 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2001:789951 CAPLUS Full-text  
 DN 136:112137  
 TI Rational use of in vitro P-glycoprotein assays in drug discovery  
 AU Polli, Joseph W.; Wring, Stephen A.; Humphreys, Joan E.; Huang, Liyue;  
 Morgan, Jonathon B.; Webster, Lindsey O.; Serabjit-Singh, Cosette S.  
 CS Preclinical Drug Metabolism and Pharmacokinetics, GlaxoSmithKline, Inc.,  
 Research Triangle Park, NC, USA  
 SO Journal of Pharmacology and Experimental Therapeutics (2001),  
 299(2), 620-628  
 CODEN: JPETAB; ISSN: 0022-3565  
 PB American Society for Pharmacology and Experimental Therapeutics  
 DT Journal  
 LA English  
 AB P-glycoprotein (Pgp) affects the absorption, distribution, and clearance of a  
 variety of compds. Thus, identification of compds. that are Pgp substrates  
 can aid drug candidate selection and optimization. Our goal was to evaluate  
 three assays used to determine whether compds. are Pgp substrates. Sixty-six  
 compds. were tested in monolayer efflux, ATPase, and calcein-AM assays. Assay  
 results yielded two categories of compds. Category I (n = 35) exhibited  
 concordance across the assays. Category II (n = 31) revealed differences  
 among the assays that related to the apparent permeability (Papp) of the  
 compds. Within category II, two groups were discerned based on the absence  
 (group IIA, n = 10, nontransported substrates) or presence (group IIB, n = 21,  
 transported substrates) of monolayer efflux. Detection of efflux (group IIB)  
 was associated with compds. having low/moderate Papp values (mean = 16.6  
 nm/s), whereas inability to detect efflux (group IIA) was associated with  
 compds. having high Papp values (mean = 535 nm/s). The calcein-AM and ATPase  
 assays revealed Pgp interactions for highly permeable group IIA compds. but  
 were less responsive than monolayer efflux for low/moderate Papp compds. of  
 group IIB. All assays detected substrates across a broad range of Papp, but  
 the efflux assay was more prone to fail at high Papp, whereas the calcein-AM  
 and ATPase assays were more prone to fail at low Papp. When Papp is low,  
 efflux is a greater factor in the disposition of Pgp substrates. The efflux  
 assay is more reliable at low/moderate Papp and is the method of choice for  
 evaluating drug candidates despite low throughput and reliance on liquid  
 chromatog. with tandem mass spectrometry.  
 IT 159989-64-7, Nelfinavir  
 RL: BSU (Biological study, unclassified); PKT (Pharmacokinetics); BIOL  
 (Biological study)  
 (comparison of in vitro P-glycoprotein assays used in drug discovery to  
 determine drugs that are Pgp substrates)  
 RN 159989-64-7 CAPLUS  
 CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-

hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-,  
(3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.

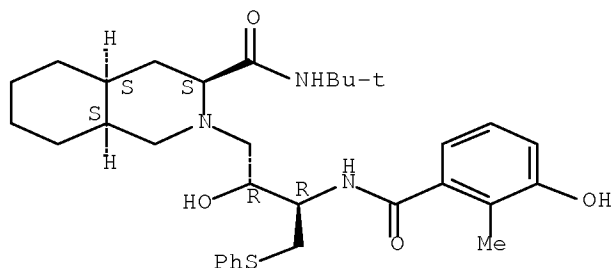


RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L11 ANSWER 525 OF 1028 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2001:785088 CAPLUS [Full-text](#)  
DN 136:95626  
TI Emergence of drug resistance mutations in a group of HIV-infected children taking nelfinavir-containing regimens  
AU Fitzgibbon, Joseph E.; Gaur, Sunanda; Walsman, Scott M.; Janahi, Mohammed; Whitley-Williams, Patricia; John, Joseph F., Jr.  
CS Division of Allergy, Immunology, and Infectious Diseases, Department of Medicine, University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School, New Brunswick, NJ, 08903, USA  
SO AIDS Research and Human Retroviruses (2001), 17(14), 1321-1328  
CODEN: ARHRE7; ISSN: 0889-2229  
PB Mary Ann Liebert, Inc.  
DT Journal  
LA English  
AB HIV-1-infected children are often treated with therapy regimens including protease inhibitors (PIs). We monitored the virol. response in a small group of pediatric patients undergoing therapy with regimens including the PI nelfinavir and determined whether new drug resistance mutations were present immediately after virol. failure. Seventeen reverse transcriptase inhibitor (RTI)-experienced children starting nelfinavir-containing therapy regimens were studied. After virol. failure, HIV-1 protease (PR) and RT sequences were examined for drug resistance mutations. Viral load levels decreased to <400 HIV RNA copies/mL in six patients and remained at <400 HIV RNA copies/mL in four patients. Three patients did not respond virol.; all three had mutations specific for one or more of their regimen drugs either before or soon after nelfinavir initiation. The virol. response was transient in eight patients whose viral loads did not decrease to <400 HIV RNA copies/mL. Genotypic data from seven of the eight patients revealed mutations specific for one or more of their regimen drugs after virol. rebound. PI resistance mutations occurred in eight patients: D30N in six, and L90M in three. In three patients, the only new mutation after failure was the RT mutation M184V. Despite virol. failure, sustained increases in CD4+ lymphocyte counts were noted in eight patients. We conclude that in this small group of pediatric patients, virol. failure occurred in all patients whose viral loads did not become undetectable after the switch to a nelfinavir-containing regimen. After failure, new drug resistance mutations were found in either PR or RT. Studies of larger cohorts are warranted to determine whether HIV-1 genotypic data can help in the formulation of effective salvage therapies in children.

IT 159989-64-7, Nelfinavir  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (drug resistance mutations in HIV-infected children taking  
 nelfinavir-containing regimens)  
 RN 159989-64-7 CAPLUS  
 CN 3-Isoquinolinecarboxamide, N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-  
 hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-,  
 (3S,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> log y

FSTN INTERNATIONAL LOGOFF AT 11:29:17 ON 31 MAR 2008